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110 South Downey Avenue, Indianapolis, Indiana 46219-6406  
Telephone 317-630-9060, Facsimile 317-630-9065  
[www.MundellAssociates.com](http://www.MundellAssociates.com)

May 4, 2011

Ms. Erin Brittain  
Project Manager  
Voluntary Remediation Program  
Office of Land Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204

Re: **Quarterly Monitoring Progress Report – 1<sup>st</sup> Quarter 2011**  
**Michigan Plaza**  
3801-3823 West Michigan Street  
Indianapolis, Indiana 46222  
IDEM Incident # 0000198  
IDEM VRP # 6061202  
MUNDELL Project No. M01046

Dear Ms. Brittain:

This *Quarterly Monitoring Progress Report* is being submitted to the Indiana Department of Environmental Management (IDEM) by MUNDELL & ASSOCIATES, INC. (MUNDELL), on behalf of AIMCO Michigan Meadows Holdings, LLC (AMMH), to summarize further site characterization, remediation activities and quarterly monitoring performed from January 1 through March 31, 2010. The following sections provide detailed discussions of the results of this work. All activities were completed on schedule.

## **GROUNDWATER MONITORING NETWORK SAMPLING**

During January 18 and 20, 2011 and February 18, 2011, quarterly groundwater sampling of the existing twenty-two (22) monitoring wells established with IDEM, and the two (2) additional monitoring wells on the Floral Park Cemetery property was performed. The following constitute this quarterly groundwater monitoring network:

*Twenty-four (24) MUNDELL monitoring wells:* MMW-1S, MMW-8S, MMW-9S, MMW-10S, MMW-11S, MMW-11D, MMW-12S, MMW-13D, MMW-14D, MMW-P-01, MMW-P-02, MMW-P-03S, MMW-P-03D, MMW-P-04, MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-09S, MMW-P-09D, MMW-P-10S, MMW-P-10D and MMW-C-01 and MMW-C-02 (MUNDELL wells on Floral Park Property).

MUNDELL also measured static groundwater elevations via an electric oil/water interface probe from the above listed monitoring well network. Additional wells gauged during this sampling event include: MMW-2S, MMW-3S, MMW-4D, MMW-5D, MMW-6D, MMW-7S, MW-167S, MW-168S, MW-168D, MW-170S, MW-170D, MW-171S and MW-171D. All monitoring well locations are presented on **Figure 1**.

During this investigation, monitoring wells MMW-P-10S and MMW-P-10D were found to contain black sediment and flakes throughout the water column. Black precipitate in groundwater can indicate the presence of iron reducing bacteria. Limited ferrous iron analyses following the initial CAP 18<sup>TM</sup> injection in August 2007 indicate slight elevations of ferrous iron concentrations within these monitoring wells, suggesting the black precipitate observed is potentially the byproduct of reductive biotransformation within the aquifer.

Monitoring well sampling, survey and construction data are provided in **Table 1**, and the shallow potentiometric surface map is illustrated on **Figure 2**. Groundwater elevations collected from monitoring wells screened in the deeper saturated units were not included in the calculation of the shallow potentiometric surface.

The wells were sampled utilizing dedicated bladder pumps for uniform low-flow purging and sample collection. The Troll 9500 multi-parameter meter (used inline with the dedicated bladder pumps) logs geochemical parameters (temperature, pH, dissolved oxygen, conductivity and oxidation-reduction potential), which help remove a minimal but sufficient amount of water (indicated by stabilization of geochemical parameters) to sample the well. The Troll helps assess the geochemical parameters as evidence of conditions naturally conducive to natural attenuation existing in the aquifer. All excess purge water was transported to 55-gallon drums located at the Site for proper disposal. In accordance with IDEM guidelines, the contents in each drum were then identified with a label describing them as non-hazardous materials.

As agreed in the October 29<sup>th</sup>, 2008, meeting with IDEM and detailed in the *Remediation Work Plan Addendum* November 2008, groundwater samples were submitted to Pace Analytical Laboratories (Pace) in Indianapolis, Indiana, for the shorter list of Volatile Organic Compound (VOC) analysis via U.S. EPA SW-846 Method 8260, along with appropriate duplicate (DUP), matrix spike (MS) and matrix spike duplicate (MSD). Groundwater samples were transferred into three 40-milliliter glass sample vials containing the preservative hydrochloric acid (HCl). Groundwater sample vials were sealed in plastic bags and placed in a cooler containing ice and delivered to Pace using appropriate chain-of-custody protocol for laboratory tests. Pace laboratory certificates of analysis for the groundwater samples analyzed are presented in **Appendix A**.

Baseline groundwater geochemical parameters (pH, dissolved oxygen, oxidation-reduction potential, conductivity and temperature) were measured with a low-flow cell and multi-parameter water quality probe in the post-injection period to evaluate whether aquifer conditions continue to be favorable for natural attenuation of the indicator compounds at the Site.

Anaerobic conditions which support the reductive dechlorination process currently exist in the aquifer. The cumulative groundwater analytical data for enhanced anaerobic bioremediation are included in **Table 4**.

Aquifer chemical parameter testing has previously been performed and will be added to the quarterly monitoring sampling plan beginning in the 2<sup>nd</sup> quarter, 2011. Additional aquifer parameters including methane, ethene and ethane will be analyzed to evaluate indicator compound breakdown and redox-sensitivity. In addition, volatile fatty acids (VFA) will also be tested to evaluate substrate distribution and lifetime duration of the product. These samples will be collected in the previously identified indicator well locations representative of each plume to monitor the presence of residual CAP 18 ME<sup>TM</sup> in the aquifer and to provide additional monitoring of aquifer conditions.

## **U.S. EPA SURVEY & GROUNDWATER LEVEL GAUGING EVENT**

A unified elevation survey and water level gauging event was conducted by the United States Environmental Protection Agency (U.S. EPA) on October 13, 2010. The gauging event included monitoring wells on the Michigan Plaza and Apartments site, Genuine Parts site and Allison Transmission site. Unified The U.S. EPA data were reviewed for consistency and have been incorporated into this Quarterly Monitoring Report. This unified elevation survey data will be used for all future groundwater monitoring events conducted at the Site.

## **GROUNDWATER ANALYTICAL RESULTS**

Groundwater analytical testing results for this quarter are summarized in **Table 2** and presented on **Figure 3**. Two (2) out of the twenty-four (24) monitoring wells sampled this quarter (MMW-1S and MMW-P-01) showed PCE concentrations exceeding the IDEM RISC Industrial Default Closure Level (IDCL). Two (2) monitoring wells (MMW-8S and MMW-P-02) demonstrated PCE concentrations exceeding the IDEM RISC Residential Default Closure Level (RDCL) but below the IDCL. The historical groundwater results are included in **Table 3**. The historical indicator compounds trends in groundwater are presented in **Figure 4**.

Two (2) of the monitoring wells (MMW-1S AND MMW-P-01) showed TCE concentrations exceeding the IDEM RISC IDCL, with one (1) monitoring well (MMW-10S) exhibiting a level exceeding the RDCL, but below the IDCL.

Three (3) monitoring wells (MMW-9S, MMW-P-01 and MMW-P-06) showed cis-1,2-DCE concentrations exceeding the IDEM RISC IDCL. Seven (7) monitoring wells (MMW-10S, MMW-11D, MMW-13D, MMW-14D, MMW-P-03S, MMW-P-07 and MMW-P-08) exhibited cis-1,2-DCE concentrations exceeding the RDCL, but below the IDCL. Nine (9) monitoring wells (MMW-1S, MMW-11S, MMW-12S, MMW-P-02, MMW-P-04, MMW-P-05, MMW-P-10S, MMW-P-10D and MMW-C-01) exhibited cis-1,2-DCE concentrations under IDEM RISC RDCL but above the detection limit.

Nineteen (19) monitoring wells (MMW-1S, MMW-8S, MMW-9S, MMW-10S, MMW-11D, MMW-13D, MMW-14D, MMW-P-01, MMW-P-02, MMW-P-03S, MMW-P-03D, MMW-P-04, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-09D, MMW-P-10S, MMW-P-10D and MMW-C-01) showed vinyl chloride concentrations exceeding the IDEM RISC IDCL.

The deep monitoring wells MMW-13D and MMW-14D exhibited cis-1,2-DCE groundwater concentrations exceeding the RDCL and exhibited vinyl chloride exceedances above IDCLs this quarter. Since these wells have been purposefully located upgradient of all three **Chemical Source Areas**, the impacts observed in these areas demonstrate groundwater impacts that are attributable to other upgradient, off-site sources and not to Michigan Plaza. The locations of all three **Chemical Source Areas** are presented on **Figure 1**. As seen on **Figure 4** the indicator compound concentrations at these deep, upgradient wells can be considered as “background levels” defined as the concentration of contaminants from the Genuine source coming into the deeper aquifer in this area. These indicator compound levels aid in discerning between the Michigan Plaza source impacts and the Genuine Site impacts, and will ultimately be used to evaluate the target cleanup levels for the deeper aquifer at the Site.

## IN-SITU BIOREMEDIATION PROGRESS

Based upon the 1) extent and severity of the indicator compound concentrations and trends; 2) site-specific operational constraints and uses; 3) geochemical and physical characteristics of the aquifer; and 4) economic factors, in-situ bioremediation with CAP 18<sup>TM</sup> and CAP 18 ME<sup>TM</sup>, followed by Monitored Natural Attenuation (MNA) is the selected remediation technology for the Site for treating groundwater, as detailed in the *RWP*. The initial CAP 18<sup>TM</sup> injection was performed in each of the three source areas in August 2007 using a direct push Geoprobe system. Locations and spacing of the injection points were designed to address the sewer line related **Chemical Source Areas** and provide injection locations in each **Chemical Source Area** that upon migration downgradient in the direction of groundwater flow, are expected to remediate the most significant groundwater impacts. A booster CAP 18 ME<sup>TM</sup> injection was performed in February 2009 to aggressively treat some areas where the chemical concentrations have begun to stabilize or are decreasing at a slow rate. During this quarter, no additional CAP 18 ME<sup>TM</sup> injections have been performed. A *Request for Revised Work Plan Approval* dated April 21, 2011, has been submitted to IDEM for review. Upon approval of the revised work plan by IDEM, MUNDELL will proceed with the third and final CAP 18 ME<sup>TM</sup> event. These remedial activities are anticipated to be completed during the 2<sup>nd</sup> quarter, 2011.

### **Indicator Chemical Trends**

A group of monitoring wells from the sampling network is utilized to monitor dissolved indicator compound concentration trends over time at various locations within the heart of the three **Chemical Source Areas**. Graphs of historical PCE, TCE, cis-1,2-DCE and vinyl chloride concentrations are developed for the following monitoring wells:

**Source Area A:** MMW-P-02, MMW-P-03S, MMW-P-03D, MMW-P-04 and MMW-C-01

**Source Area B:** MMW-P-01, MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-10S, MMW-P-10D and MMW-8S

**Source Area C:** MMW-1S, MMW-9S and MMW-10S

**Figures 4 and 5** illustrate the changes in the chlorinated solvents concentrations demonstrating reductive dechlorination as a result of the CAP 18 ME<sup>TM</sup> remediation implementation. To illustrate the effect of the CAP 18<sup>TM</sup> CAP 18 ME<sup>TM</sup> injections on dissolved chlorinated concentrations, injection dates are included on the graphs.

PCE impacts in **Source Area A** appear to have a decreasing trend with PCE concentrations below the detection limit at MMW-P-03S, MMW-P-03D, MMW-C-01 and MMW-P-04. PCE concentrations have declined steadily since the initial August 2007 CAP 18<sup>TM</sup> injection; however, concentrations at MMW-P-02 remain above the IDEM RDCL.

Vinyl chloride and cis-1,2-DCE concentrations demonstrated generally increasing trends after the second round of CAP 18 ME<sup>TM</sup> injection in February 2009. Generation of both cis-1,2-DCE and vinyl chloride as byproducts of enhanced reductive dechlorination appear to have slowed near **Source Area A**, particularly at monitoring wells MMW-P-03D, MMW-C-01 and MMW-P-04.

Cis-1,2-DCE concentrations have somewhat stabilized and remain elevated (near the IDEM RDCL concentration) at monitoring wells MMW-P-02 and MMW-P-03S. In addition, both monitoring well locations exhibit elevated vinyl chloride concentrations above IDEM IDCLs.

These indicator compound concentration trends in the vicinity of **Source Area A**, coupled with PCE concentrations in excess of IDEM RDCLs remaining at MMW-P-02, indicate the need for a third and final CAP 18 ME<sup>TM</sup> injection event in **Source Area A**, specifically near the sewer line elbow joint near the southwest corner of the Plaza building.

PCE impacts in **Source Area B** appear to have a generally decreasing trend with PCE concentrations below the detection limit at MMW-P-05, MMW-P-06, MMW-P-07, MMW-P-08, MMW-P-10S and MMW-P-10D. PCE concentrations have declined steadily since the initial August 2007 CAP 18<sup>TM</sup> injection; however, concentrations at MMW-P-01 and MMW-8S remain above the IDEM IDCL and RDCL, respectively.

Vinyl chloride and cis-1,2-DCE concentrations demonstrated generally increasing trends after the first and second round of CAP 18<sup>TM</sup> and CAP 18 ME<sup>TM</sup> injections in August 2007 and February 2009. Generation of both cis-1,2-DCE and vinyl chloride as byproducts of enhanced reductive dechlorination continues near **Source Area B**, particularly at monitoring wells MMW-P-01, MMW-P-05, MMW-P-06, MMW-8S, MMW-P-08 and MMW-P-10D. Vinyl

chloride and cis-1,2-DCE concentrations continue their general decline in monitoring wells MMW-P-07 and MMW-P-10S, showing further evidence of enhanced reductive dechlorination processes downgradient of **Source Area B**.

These indicator compound concentration trends in the vicinity of **Source Area B** indicate that reductive dechlorination processes continue to effectively consume PCE and TCE while generating daughter products in the saturated zone. In addition, daughter product breakdown into cis-1,2-DCE and vinyl chloride continues in select downgradient wells as expected. However, PCE concentrations have been slowly increasing over the last three quarters at MMW-8S, located immediately downgradient of a sewer line source area identified during soil investigation activities completed during 2005. Rebounding PCE concentrations above the IDEM IDCL at MMW-8S (14.1 ug/L) indicate the likelihood of a limited PCE source remaining in the vicinity. As such, MUNDELL believes a third and final CAP 18 ME<sup>TM</sup> injection event is necessary to address the remaining PCE concentrations in **Source Area B**.

Monitoring well locations near **Source Area C** (MMW-1S, MMW-9S and MMW-10S) appear to indicate downgradient migration of CAP 18 ME<sup>TM</sup> and slowing of previously inferred reductive dechlorination processes. PCE concentrations have declined steadily since the initial August 2007 CAP 18<sup>TM</sup> injection at MMW-9S and MMW-10S; however, concentrations at MMW-1S (217 ug/L) remain above the IDEM IDCL showing an increase in PCE concentration during first quarter 2011.

Vinyl chloride and cis-1,2-DCE concentrations demonstrated generally increasing trends after the second round of CAP 18 ME<sup>TM</sup> injection in February 2009. Generation of both cis-1,2-DCE and vinyl chloride as byproducts of enhanced reductive dechlorination appear to have slowed near **Source Area C**, particularly at monitoring wells MMW-1S and MMW-10S.

These indicator compound concentration trends in the vicinity of **Source Area C**, coupled with PCE concentrations in excess of IDEM RDCLs remaining at MMW-1S, indicate the need for a third and final CAP 18 ME<sup>TM</sup> injection event in **Source Area C**.

Thus, an overall decreasing trend in PCE and TCE concentrations (in some areas below the laboratory reporting limit), and an increase in the daughter product concentrations (indicating breakdown of parent compounds via reductive dechlorination) has occurred significantly subsequent to the injections in the **Source Areas A, B and C** in August 2007 and February 2009. Because these processes appear to have slowed over the last several quarters and increases in PCE concentrations have been observed in selected locations, additional CAP 18 ME<sup>TM</sup> injections in **Source Areas A, B and C** have been proposed to IDEM. Upon approval of the *Request for Revised Work Plan Approval* (April 21, 2011), MUNDELL will proceed with the third and final CAP 18 ME<sup>TM</sup> injection event at the Site. The cumulative groundwater analytical data for enhanced anaerobic bioremediation are included in **Table 4**. All groundwater analytical results are attached in **Appendix A**.

## INDOOR AIR MITIGATION SYSTEMS PERFORMANCE

Four sub-floor slab depressurization units were installed by *Air Quality Control (AQC)* under the oversight of MUNDELL in September 2006. Three additional sub-floor slab depressurization units were installed by AQC under the oversight of MUNDELL on March 19 and 26, 2008.

Unit/blowers were installed in the following spaces at Michigan Plaza: 1) the Village Pantry (B1); 2) the former Handicap Workshop Space (B2); 3) the Zacatecas (B3); and 4) the laundromat (Michigan Plaza Family Laundry) (B4). The systems installed at the Michigan Apartments are: Building No. 1, Basement Apartment 101 (B5); Building No. 6, Basement Apartment 602 (B6); and Building No. 10, Basement Apartment 1001 (B7). The system locations are illustrated on **Figure 6**.

Since the time of installation, system stack air samples were collected weekly during October 2006, followed by bi-weekly sampling during November and December 2006, monthly throughout fourth quarter 2006, and then on a quarterly basis thereafter. PID readings have also been concurrently measured in each of the stacks. The historical PCE concentration trends and cumulative pounds of PCE and total contaminants removed by each of the systems (B1 through B7) are summarized in **Figures 7 through 15**.

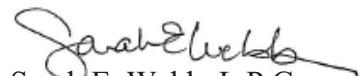
As of the end of the first quarter of 2011, approximately *14.36 pounds* of PCE and *17.80 pounds* of total chlorinated solvents have been removed at the *Michigan Apartments property* (sub slab depressurization systems **B5**, **B6** and **B7**); and approximately *90.82 pounds* of PCE and *98.34 pounds* of total chlorinated solvents have been removed at the *Michigan Plaza property* (sub slab depressurization systems **B1**, **B2**, **B3** and **B4**). The associated calculations are provided in **Appendix B**. A concentration of half the PQL (practical quantitation limit) is assumed for the indicator compounds demonstrating concentrations below the laboratory PQL, with the exception of vinyl chloride where an average concentration of 0.015 PPMV (derived from the J flag values for VC concentrations below PQL) is used for calculation purposes.

Overall, decreases in PCE concentrations have been noted in all mitigation systems going back to at least May 2009. Air mitigation systems B-4 and B-7 were non-detect for PCE concentrations in vapor during the first quarter 2011 sampling event. PCE concentrations in mitigation systems B-1, B-2, B-4, B-5 and B-6 have decreased by an order of magnitude since air monitoring was initiated for each respective system. Air mitigation system B-3 has shown generally declining PCE concentrations, although during first quarter 2011 concentrations remained above 1,000 ug/m<sup>3</sup>.

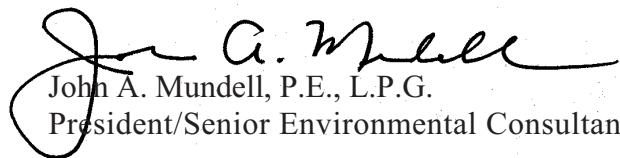
We appreciate the opportunity to update IDEM on the progress of remedial activities and monitoring at the Site. If you have any questions, please do not hesitate to contact us at (317) 630-9060 or via email ([jmundell@MundellAssociates.com](mailto:jmundell@MundellAssociates.com); [swebb@MundellAssociates.com](mailto:swebb@MundellAssociates.com)).

Sincerely,

**MUNDELL & ASSOCIATES, INC.**



Sarah E. Webb, L.P.G.  
Project Hydrogeologist



John A. Mundell, P.E., L.P.G.  
President/Senior Environmental Consultant

Attachments:    Tables  
                    Figures  
                    Appendices

cc:        Mr. Peter Cappel, AMMH

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Table 2	Monitoring Well Groundwater Analytical Results
Table 3	Cumulative Monitoring Well Groundwater Analytical Results
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Figure 14	PCE Concentration Trends & Cumulative Pounds Removed (B-1 through B-4)
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## **APPENDICES**

Appendix A. Lab Analytical Results

Appendix B. Air Mitigation Systems: Pounds of Contaminants Removed

## **TABLES**

**Table 1**  
**Tabulated Water Level Measurements and Monitoring Well Construction Data**  
**Quarter 1 (2011)**  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No. M01046**

Monitoring Well	Date of Water Level	Top of Casing Elevation (feet MSL)	Total Depth (feet)	Screened Interval (feet)	Depth To Water (feet)	Groundwater Elevation (feet MSL)
<b>On-Site Monitoring Wells</b>						
MMW-P-01	1/17/2011	715.26	28	18.00 - 28.00	19.77	695.49
MMW-P-02	1/17/2011	716.09	30	20.00 - 30.00	20.78	695.31
MMW-P-03S	1/17/2011	715.95	28	18.00 - 28.00	20.65	695.30
MMW-P-03D	1/17/2011	716.02	35	25.00 - 35.00	20.66	695.36
MMW-P-04	1/17/2011	716.04	28	18.00 - 28.00	20.42	695.62
MMW-P-05	1/17/2011	715.55	28	18.00 - 28.00	20.09	695.46
MMW-P-06	1/17/2011	716.14	28	18.00 - 28.00	20.67	695.47
MMW-P-07	1/17/2011	714.90	28	18.00 - 28.00	19.10	695.80
MMW-P-08	1/17/2011	714.53	28	18.00 - 28.00	18.48	696.05
MMW-P-10S	1/17/2011	714.35	28	18.00 - 28.00	18.46	695.89
MMW-P-10D	1/17/2011	714.42	38	28.00 - 38.00	18.63	695.79
<b>Off-Site Monitoring Well (Olin-Cossell ROW)</b>						
MMW-P-09S	1/17/2011	714.80	28	18.00 - 28.00	20.37	694.43
MMW-P-09D	1/17/2011	714.82	45	35.00 - 45.00	20.39	694.43
<b>Off-Site Monitoring Wells (Environ/Keramida)</b>						
MW-167S	1/17/2011	716.07	22	12.00 - 22.00	19.15	696.92
MW-167D	1/17/2011	715.61	33	28.00 - 33.00	18.73	696.88
MW-168S	1/17/2011	714.58	22	12.00 - 22.00	18.42	696.16
MW-168D	1/17/2011	714.46	31	26.00 - 31.00	18.35	696.11
MW-169S	1/17/2011	715.92	25	15.00 - 25.00	21.09	694.83
MW-169D	-	715.69	37	32.00 - 37.00	-	-
MW-170S	1/17/2011	717.14	27	17.00 - 27.00	21.70	695.44
MW-170D	1/17/2011	717.07	39	34.00 - 39.00	21.63	695.44
MW-171S	1/17/2011	711.58	22	12.00 - 22.00	16.20	695.38
MW-171D	1/17/2011	711.62	49	44.00 - 49.00	16.70	694.92
<b>Off-Site Monitoring Wells (Michigan Meadows Apartments)</b>						
MMW-1S	1/17/2011	712.92	20	10.00 - 20.00	16.41	696.51
MMW-2S	-	712.95	20	10.00 - 20.00	-	-
MMW-3S	1/17/2011	710.20	30	18.00 - 28.00	12.89	697.31
MMW-4D	1/17/2011	711.29	66	56.00 - 66.00	14.15	697.14
MMW-5D	-	711.27	51	36.00 - 41.00	-	-
MMW-6D	1/17/2011	712.40	51	39.00 - 49.00	14.61	697.79
MMW-7S	-	712.09	26	12.00 - 22.00	-	-
MMW-8S	1/17/2011	714.24	24	14.00 - 24.00	17.46	696.78
MMW-9S	1/17/2011	713.71	25	15.00 - 25.00	17.67	696.04
MMW-10S	1/17/2011	712.69	25	15.00 - 25.00	16.73	695.96
MMW-11S	1/17/2011	713.17	33	14.00 - 24.00	16.60	696.57
MMW-11D	1/17/2011	713.33	33	23.00 - 33.00	16.43	696.90
MMW-12S	1/17/2011	712.15	24	14.00 - 24.00	15.73	696.42
MMW-13D	1/17/2011	713.28	50	35.00 - 50.00	16.43	696.85
MMW-14D	1/17/2011	712.41	50	40.00 - 50.00	15.51	696.90
<b>Off-Site Monitoring Wells (Floral Park Cemetery)</b>						
MMW-C-01	1/19/2011	715.73	28	18.00 - 28.00	20.43	695.30
MMW-C-02	1/19/2011	714.64	28	18.00 - 28.00	19.80	694.84

Notes:

- 1) All Top of Casing (TOC) data was obtained from the Unified U.S. EPA Elevation Survey completed on October 13, 2011.
- 2) NG = Not Gauged

**Table 2**  
**Monitoring Well Groundwater Analytical Results**  
**Quarter 1 (2011)**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>Monitoring Wells (Apts)</b>							
MMW-1S	1/19/2011	217	46.2	35.4	<5.0	<5.0	21.8
MMW-8S	1/19/2011	14.1	<5.0	<5.0	<5.0	<5.0	172
MMW-9S	1/19/2011	<50.0	<50.0	1,580	136	<50.0	1,490
MMW-10S	1/19/2011	<5.0	14.4	80.9	12.7	<5.0	88.0
MMW-11S	1/19/2011	<5.0	<5.0	46.3	12.9	<5.0	<2.0
MMW-11D	1/19/2011	<5.0	<5.0	570	26.7	<5.0	5.9
MMW-12S	1/18/2011	<5.0	<5.0	19.7	<5.0	<5.0	<2.0
MMW-13D	1/19/2011	<5.0	<5.0	920	12.3	<5.0	179
MMW-14D	1/18/2011	<5.0	<5.0	785	24.0	<5.0	109
<b>Monitoring Wells (Plaza)</b>							
MMW-P-01	1/20/2011	153	140	1,960	<50.0	<50.0	11,100
MMW-P-02	1/19/2011	15.9	<5.0	64.3	14.0	<5.0	396
MMW-P-03S	1/19/2011	<5.0	<5.0	79.7	19.4	<5.0	338
MMW-P-03D	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	46.2
MMW-P-04	2/18/2011	<5.0	<5.0	6.4	<5.0	<5.0	36.3
MMW-P-05	1/20/2011	<5.0	<5.0	14.1	<5.0	<5.0	<2.0
MMW-P-06	1/20/2011	<100	<100	2,700	<100	<100	15,000
MMW-P-07	1/20/2011	<5.0	<5.0	295	13.9	<5.0	562
MMW-P-08	1/20/2011	<25.0	<25.0	590	14.8	<25.0	1,770
MMW-P-09S	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MMW-P-09D	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	66.9
MMW-P-10S	1/20/2011	<5.0	<5.0	11.7	<5.0	<5.0	27.8
MMW-P-10D	1/20/2011	<5.0	<5.0	21.4	<5.0	<5.0	1,210
<b>Keramida/Environ Monitoring Wells (Off-Site)</b>							
MW-168D	NS	NS	NS	NS	NS	NS	NS
<b>Floral Park Cemetery Monitoring Wells (Off-Site)</b>							
MMW-C-01	1/19/2011	<5.0	<5.0	14.7	<5.0	<5.0	215
MMW-C-02	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
IDEML RISC Default Industrial Cleanup Level		55	31	1,000	2,000	1,000	4
IDEML RISC Default Residential Cleanup Level		5	5	70	100	80	2

Note:

All Values Over IDEML RISC Industrial Default Cleanup Level in **RED**

All Values Over IDEML RISC Residential Default Cleanup Level in **BLUE**

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

ug/L = micrograms per liter

NS = Not Sampled

All analytical results presented in micrograms per liter (ug/L).

**Table 3**  
**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
<b>Monitoring Wells (Apts)</b>							
MMW-1S	9/10/2004	<5.0	<5.0	<5.0	<5.0	<5.0	<b>4.1</b>
	3/15/2005	<b>150</b>	<b>10.0</b>	<5.0	<5.0	<5.0	<2.0
	11/9/2005	<b>130</b>	<b>8.3</b>	<5.0	<5.0	<5.0	<b>8.9</b>
	9/5/2006	<b>200</b>	<b>13.0</b>	<5.0	<5.0	<5.0	<b>4.6</b>
	2/22/2007	<b>220</b>	<b>14.9</b>	<5.0	<5.0	<5.0	<2.0
	6/14/2007	<b>240</b>	<5.0	<5.0	<5.0	<5.0	<2.0
	9/19/2007	<b>362</b>	<b>10.5</b>	<5.0	<5.0	31.6	<2.0
	12/13/2007	<b>330</b>	<b>8.1</b>	<5.0	<5.0	27.0	<2.0
	3/21/2008	<b>280</b>	<b>14.0</b>	<5.0	<5.0	<5.0	<2.0
	6/6/2008	<b>277</b>	<b>13.2</b>	<5.0	<5.0	<5.0	<2.0
	9/11/2008	<b>288</b>	<b>14.7</b>	<5.0	<5.0	<5.0	<2.0
	11/20/2008	<b>223</b>	<b>45.5</b>	<b>169</b>	<5.0	<5.0	<b>14.5</b>
	3/16/2009	<b>199</b>	<b>11.3</b>	<5.0	<5.0	<5.0	<2.0
	6/16/2009	<b>237</b>	<b>13.4</b>	<5.0	<5.0	<5.0	<2.0
	8/5/2009	<b>195</b>	<b>22.9</b>	<b>71.3</b>	<5.0	<5.0	<b>9.3</b>
	11/2/2009	<b>189</b>	<b>39.0</b>	<b>119</b>	<5.0	<5.0	<b>26.6</b>
	2/3/2010	<b>160</b>	<b>49.7</b>	59.1	<5.0	<5.0	<b>35.4</b>
	4/22/2010	<b>206</b>	<b>14.7</b>	<5.0	<5.0	<5.0	<2.0
	7/21/2010	<b>310</b>	<b>21.8</b>	<5.0	<5.0	<5.0	<2.0
	10/12/2010	<b>89.4</b>	<b>21.3</b>	<b>208</b>	<5.0	<5.0	<b>32.2</b>
	1/19/2011	<b>217</b>	<b>46.2</b>	35.4	<5.0	<5.0	<b>21.8</b>
MMW-2S	9/10/2004	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	11/9/2005	<5.0	<5.0	<5.0	<5.0	<5.0	<b>5.2</b>
	9/5/2006	<5.0	<5.0	<5.0	<5.0	<5.0	<b>5.2</b>
	6/2/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MMW-3S	8/26/2004	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	9/10/2004	<5.0	<b>5.2</b>	<5.0	<5.0	<5.0	<2.0
	11/9/2005	<5.0	<b>28.0</b>	5.4	<5.0	<5.0	<2.0
	9/5/2006	<5.0	<b>23.0</b>	7.4	<5.0	<5.0	<2.0
	6/2/2008	<5.0	<b>20.2</b>	7.9	<5.0	<5.0	<b>2.8</b>
	6/15/2009	<5.0	<b>15.3</b>	11.7	<5.0	<5.0	<b>3.0</b>
MMW-4D	4/20/2010	<5.0	<b>15.9</b>	8.0	<5.0	<5.0	<2.0
	8/25/2004	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	9/10/2004	<5.0	<b>5.2</b>	<5.0	<5.0	<5.0	<2.0
	11/10/2005	<5.0	<b>850</b>	<5.0	<5.0	<5.0	<b>240</b>
	9/5/2006	<5.0	<5.0	<b>1,100</b>	<5.0	<5.0	<b>220</b>
	6/2/2008	<5.0	<5.0	<b>515</b>	<5.0	<5.0	<b>32.2</b>
MMW-5D	6/15/2009	<5.0	<5.0	<b>892</b>	7.0	<5.0	<b>142</b>
	4/20/2010	<5.0	<5.0	<b>719</b>	<5.0	<5.0	<b>237</b>
	8/24/2004	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	9/10/2004	<5.0	<5.0	<b>980</b>	<5.0	<5.0	<b>200</b>
	11/10/2005	<5.0	<5.0	<b>850</b>	<5.0	<5.0	<b>270</b>
	9/5/2006	<50	<50	<b>2,500</b>	<50	<5.0	<b>140</b>
MMW-6D	6/2/2008	<5.0	<5.0	<b>1,360</b>	19.9	<5.0	<b>207</b>
	6/15/2009	<5.0	<5.0	<b>1,110</b>	14.5	<5.0	<b>242</b>
	4/20/2010	<5.0	<5.0	<b>943</b>	<5.0	<5.0	<b>204</b>
	9/10/2004	<5.0	<5.0	<b>540</b>	<5.0	<5.0	<b>400</b>
	11/10/2005	<5.0	<5.0	<b>750</b>	<5.0	<5.0	<b>700</b>
	9/5/2006	<5.0	<5.0	<b>300</b>	<5.0	<5.0	<b>440</b>
IDEM RISC Industrial Default Cleanup Level - 2006		<b>55</b>	<b>31</b>	<b>1,000</b>	<b>2,000</b>	<b>1,000</b>	<b>4</b>
IDEM RISC Residential Default Cleanup Level - 2006		<b>5</b>	<b>5</b>	<b>70</b>	<b>100</b>	<b>80</b>	<b>2</b>

Notes:

All Values Over IDEM RISC Default Industrial Cleanup Level in **RED**

All Values Over IDEM RISC Default Residential Cleanup Level in **BLUE**

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

Green Shading indicates areas that appear to be undergoing reductive dechlorination due to CAP-18 Injections

"J" designation indicates concentration was estimated due to high concentration of one parameter requiring dilution on other parameter quantitations

All analytical results presented in micrograms per liter (ug/L).

**Table 3**  
**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Table 3							
Cumulative Monitoring Well Groundwater Analytical Results							
Michigan Plaza							
Indianapolis, Indiana							
MUNDELL Project No.: M01046							
Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MMW-7S	8/24/2004	<5.0	<5.0	28.0	<5.0	<5.0	<2.0
	9/10/2004	<5.0	<5.0	8.5	<5.0	<5.0	<2.0
	11/9/2005	<5.0	<5.0	9.5	<5.0	<5.0	<2.0
	9/5/2006	<5.0	<5.0	5.8	<5.0	<5.0	4.5
	6/2/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/15/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MMW-8S	2/22/2007	114	<5.0	289	13.8	<5.0	40.6
	6/14/2007	15.9	<5.0	364	9.5	<5.0	82.1
	9/19/2007	<5.0	<5.0	778	24.6	<5.0	145
	12/13/2007	7.7	<5.0	1,000	7.4	<5.0	586
	3/20/2008	<5.0	<5.0	470	<5.0	<5.0	330
	6/6/2008	<5.0	<5.0	336	<5.0	<5.0	509
	9/10/2008	<5.0	<5.0	275	<5.0	<5.0	322
	11/20/2008	<5.0	<5.0	123	<5.0	<5.0	584
	3/16/2009	<5.0	<5.0	95.0	<5.0	<5.0	348
	6/16/2009	<5.0	<5.0	94.3	6.1	<5.0	280
	8/5/2009	<5.0	<5.0	83.8	<5.0	<5.0	261
	11/2/2009	<5.0	<5.0	58.3	<5.0	<5.0	277
	2/3/2010	7.9	<5.0	15.3	<5.0	<5.0	236
	4/22/2010	<5.0	<5.0	9.0	<5.0	<5.0	151
MMW-9S	7/21/2010	6.2	<5.0	14.9	<5.0	5.0	230
	10/12/2010	8.4	<5.0	5.4	<5.0	<5.0	158
	1/19/2011	14.1	<5.0	<5.0	<5.0	<5.0	172
	2/22/2007	782	88.6	78.9	<5.0	<5.0	<2.0
	6/14/2007	858	85.7	65.3	<5.0	<5.0	<2.0
	9/20/2007	1,430	112	70.3	8.2	<5.0	<2.0
	12/12/2007	<50.0	<50.0	1,700	<50.0	<50.0	<20.0
	3/21/2008	57.0	20.0	2,900	39.0	<5.0	16.0
	6/6/2008	52.9	28.0	1,540	38.2	<5.0	295
	9/10/2008	52.6	22.7	4,920	94.5	<5.0	167
	11/20/2008	<5.0	<5.0	5,820	90.2	<5.0	1,010
	3/16/2009	<5.0	<50.0	7,490	73.8	<50.0	1,800
	6/16/2009	44.5	24.9	4,810	64.0	<5.0	876
	8/5/2009	<5.0	<5.0	5,010	64.2	<5.0	1,110
	11/2/2009	<5.0	<5.0	5,410	120	<5.0	1,050
	2/3/2010	<50.0	<50.0	5,090	98.4	<50.0	1,700
MMW-10S	4/22/2010	<5.0	<5.0	4,300	77.1	<5.0	1,710
	7/21/2010	<50.0	<50.0	2,910	73.2	<50.0	2,020
	10/12/2010	<50.0	<50.0	2,430	<50.0	<50.0	1,270
	1/19/2011	<50.0	<50.0	1,580	136	<50.0	1,490
	2/22/2007	49.6	<5.0	<5.0	<5.0	<5.0	<2.0
	6/14/2007	77.6	<5.0	<5.0	<5.0	<5.0	<2.0
	9/19/2007	66.0	<5.0	<5.0	<5.0	<5.0	<2.0
	12/12/2007	124	56.0	149	<5.0	<5.0	<2.0
	3/21/2008	440	12.0	8.1	<5.0	<5.0	12.0
	6/6/2008	541	62.1	218	<5.0	<5.0	30.4
	9/10/2008	6.9	<5.0	353	8.2	<5.0	<2.0
	11/20/2008	<5.0	<5.0	212	<5.0	<5.0	15.9
	3/16/2009	<5.0	<5.0	302	<5.0	<5.0	114
	6/16/2009	22.8	15.4	415	12.0	<5.0	81.4
	8/5/2009	<5.0	<5.0	224	5.5	<5.0	156
MMW-11S	11/2/2009	12.8	10.1	239	5.6	<5.0	119
	2/3/2010	8.3	7.5	180	5.1	<5.0	148
	4/22/2010	<5.0	<5.0	165	<5.0	<5.0	143
	7/21/2010	15.6	9.7	267	8.3	<5.0	239
	10/12/2010	<5.0	<5.0	100	<5.0	<5.0	96.1
	1/19/2011	<5.0	14.4	80.9	12.7	<5.0	88.0
	6/14/2007	<5.0	<5.0	225	6.8	<5.0	18.6
	9/19/2007	<5.0	<5.0	442	21.1	<5.0	30.1
	12/13/2007	7.2	<5.0	920	27.0	<5.0	49.0
	3/20/2008	<5.0	<5.0	420	17.0	<5.0	4.9
	6/5/2008	<5.0	<5.0	623	23.1	<5.0	26.7
	9/10/2008	<5.0	<5.0	327	18.3	<5.0	9.9
	11/20/2008	<5.0	<5.0	554	23.9	<5.0	18.5
IDEM RISC Industrial Default Cleanup Level - 2006	3/16/2009	<5.0	<5.0	37.6	<5.0	<5.0	<2.0
	6/16/2009	<5.0	<5.0	253	17.9	<5.0	2.8
	8/5/2009	<5.0	<5.0	80.7	5.5	<5.0	3.1
	11/2/2009	<5.0	<5.0	59.9	<5.0	<5.0	<2.0
	2/3/2010	<5.0	<5.0	29.4	<5.0	<5.0	<2.0
	4/22/2010	<5.0	<5.0	17.7	<5.0	<5.0	<2.0
	7/21/2010	<5.0	<5.0	120	7.4	<5.0	4.3
	10/12/2010	<5.0	<5.0	85.1	5.6	<5.0	<2.0
	1/19/2011	<5.0	<5.0	46.3	12.9	<5.0	<2.0
	IDEM RISC Residential Default Cleanup Level - 2006	55	31	1,000	2,000	1,000	4

**Table 3**  
**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MMW-11D	6/16/2009	<5.0	<5.0	25.3	6.7	<5.0	<2.0
	8/5/2009	<5.0	<5.0	485	22.6	<5.0	15.3
	11/2/2009	<5.0	<5.0	771	31.8	<5.0	18.8
	2/3/2010	<5.0	<5.0	301	28.2	<5.0	5.2
	4/22/2010	<5.0	<5.0	307	21.8	<5.0	2.6
	7/21/2010	<5.0	<5.0	396	21.8	<5.0	10.9
	10/12/2010	<5.0	<5.0	162	<5.0	<5.0	<2.0
	1/19/2011	<5.0	<5.0	570	26.7	<5.0	5.9
MMW-12S	6/16/2009	<5.0	<5.0	9.7	<5.0	<5.0	6.5
	8/5/2009	<5.0	<5.0	47.3	<5.0	<5.0	15.2
	11/2/2009	<5.0	<5.0	28.8	<5.0	<5.0	7.1
	2/3/2010	<5.0	<5.0	11.4	<5.0	<5.0	2.1
	4/20/2010	<5.0	<5.0	5.3	<5.0	<5.0	<2.0
	7/21/2010	<5.0	<5.0	25.4	<5.0	<5.0	7.3
	10/12/2010	<5.0	<5.0	16.8	<5.0	<5.0	<2.0
	1/18/2011	<5.0	<5.0	19.7	<5.0	<5.0	<2.0
MMW-13D	8/5/2009	<5.0	<5.0	672	<5.0	<5.0	59.2
	11/2/2009	<5.0	<5.0	949	<5.0	<5.0	182
	2/3/2010	<5.0	<5.0	819	6.20	<5.0	260
	4/22/2010	<5.0	<5.0	469	<5.0	<5.0	4.6
	7/21/2010	<5.0	<5.0	432	<5.0	<5.0	16.6
	10/12/2010	<5.0	<5.0	1,200	<5.0	<5.0	187
	1/19/2011	<5.0	<5.0	920	12.3	<5.0	179
MMW-13D Low	6/16/2009	<5.0	<5.0	613	10.4	<5.0	17.3
MMW-13D Medium (29')	6/16/2009	<5.0	<5.0	578	12.1	<5.0	14.9
MMW-13D High (17)	6/16/2009	<5.0	<5.0	597	9.7	<5.0	21.1
MMW-14D	6/16/2009	<5.0	<5.0	648	15.6	<5.0	57.6
	8/5/2009	<5.0	<5.0	589	10.9	<5.0	79.1
	11/2/2009	<5.0	<5.0	541	9.2	<5.0	83.8
	2/3/2010	<5.0	<5.0	871	13.9	<5.0	84.9
	4/20/2010	<5.0	<5.0	763	14.1	<5.0	72.8
	7/21/2010	<5.0	<5.0	805	14.6	<5.0	60.8
	10/12/2010	<5.0	<5.0	775	8.4	<5.0	83.3
	1/18/2011	<5.0	<5.0	785	24.0	<5.0	109
<b>Monitoring Wells (Plaza)</b>							
MMW-P-01	11/9/2005	33	210	160	9.6	<5.0	76.0
	2/22/2007	85.2	356	274	16.7	<5.0	28.7
	6/14/2007	111	368	350	10.0	<5.0	79.6
	9/20/2007	206	322	300	11.5	<5.0	127
	12/14/2007	230	320	240	7.1	<5.0	87.0
	3/21/2008	120	170	3,100	25.0	<5.0	42.0
	6/5/2008	22.0	31.5	3,660	68.6	<5.0	123
	9/11/2008	14.2	15.1	1,690	<5.0	<5.0	87.7
	11/19/2008	<5.0	<5.0	4,320	<5.0	<5.0	116
	3/17/2009	17.5	22.6	12,300	143	<5.0	3,290
	6/17/2009	<50.0	<50.0	4,020	63.9	<50.0	1,840
	8/6/2009	97.4	<50.0	12,200	<50.0	<50.0	3,730
	11/3/2009	103	58.3	9,330	<50.0	<50.0	4,770
	2/4/2010	104	60.6	9,190	130	<50.0	13,600
	4/22/2010	90.5	79.0	9,400	94.7	<50.0	12,600
	7/7/2010	<50.0	<50.0	1,880	<50.0	<50.0	2,960
	10/14/2010	<125	<125	4,760	<125	<125	5,440
	1/20/2011	153	140	1,960	<50.0	<50.0	11,100
MMW-P-02	11/8/2005	24.0	<5.0	87.0	7.3	<5.0	49.0
	2/22/2007	184	<5.0	39.4	<5.0	<5.0	27.4
	6/14/2007	17.1	<5.0	35.0	<5.0	<5.0	27.5
	9/19/2007	13.3	<5.0	66.3	5.6	<5.0	50.1
	12/13/2007	7.8	<5.0	69.0	<5.0	<5.0	53.0
	3/20/2008	19.0	<5.0	67.0	<5.0	<5.0	42.0
	6/5/2008	94.9	<5.0	44.0	<5.0	<5.0	46.4
	9/11/2008	17.5	<5.0	46.6	<5.0	<5.0	42.0
	11/19/2008	10.7	<5.0	75.4	<5.0	<5.0	69.5
	3/17/2009	23.4	<5.0	65.4	5.3	<5.0	68.4
	6/17/2009	5.1	<5.0	54.2	9.2	<5.0	80.6
	8/6/2009	5.1	<5.0	55.8	<5.0	<5.0	56.2
IDEM RISC Industrial Default Cleanup Level - 2006	11/3/2009	11.1	<5.0	60.1	<5.0	<5.0	73.9
	2/4/2010	7.4	<5.0	75.8	5.8	<5.0	104
	4/22/2010	9.9	6.8	56.0	8.0	<5.0	110
	7/21/2010	24	<5.0	72.4	<5.0	<5.0	161
	10/13/2010	9.3	<5.0	61.0	<5.0	<5.0	95.0
	1/19/2011	15.9	<5.0	64.3	14.0	<5.0	396
		55	31	1,000	2,000	1,000	4
IDEM RISC Residential Default Cleanup Level - 2006		5	5	70	100	80	2

Notes:

All Values Over IDEM RISC Default Industrial Cleanup Level in **RED**

All Values Over IDEM RISC Default Residential Cleanup Level in **BLUE**

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

Green Shading indicates areas that appear to be undergoing reductive dechlorination due to CAP-18 Injections

"J" designation indicates concentration was estimated due to high concentration of one parameter requiring dilution on other parameter quantitations

All analytical results presented in micrograms per liter (ug/L).

**Table 3**  
**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MMW-P-03S	11/9/2005	110	<5.0	97.0	9.6	<5.0	<2.0
	2/22/2007	397	<5.0	105	10.0	<5.0	<2.0
	6/14/2007	256	<5.0	96.4	9.2	<5.0	9.3
	9/20/2007	144	<5.0	131	15.8	<5.0	16.0
	12/13/2007	67.0	<5.0	88.0	5.3	<5.0	15.0
	3/20/2008	130	<5.0	84.0	7.3	<5.0	10.0
	6/5/2008	19.4	<5.0	380	14.9	<5.0	10.6
	9/11/2008	<5.0	<5.0	<5.0	<5.0	<5.0	72.6
	11/19/2008	<5.0	6.0	494	<5.0	<5.0	40.8
	3/17/2009	7.5	<5.0	904	38.7	<5.0	283
	6/17/2009	<5.0	<5.0	332	22.3	<5.0	759
	8/6/2009	30.6	8.2	573	25.0	<5.0	843
	11/3/2009	<5.0	<5.0	141	16.1	<5.0	379
	2/4/2010	<5.0	<5.0	155	19.4	<5.0	382
	4/22/2010	14.2	8.9	156	13.4	<5.0	377
	7/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	141
	10/13/2010	<5.0	<5.0	70.9	9.2	<5.0	542
	1/19/2011	<5.0	<5.0	79.7	19.4	<5.0	338
MMW-P-03D	11/9/2005	22.0	<5.0	42.0	<5.0	<5.0	2.0
	2/22/2007	48.9	<5.0	57.8	<5.0	39.0	15.6
	6/14/2007	21.7	<5.0	74.9	<5.0	<5.0	34.5
	9/19/2007	14.3	<5.0	76.1	7.3	<5.0	36.6
	12/13/2007	11.0	<5.0	40.0	<5.0	<5.0	20.0
	3/20/2008	<5.0	<5.0	170	6.0	<5.0	18.0
	6/5/2008	<5.0	<5.0	150	7.4	<5.0	26.0
	9/11/2008	<5.0	<5.0	95.7	6.4	<5.0	<2.0
	11/19/2008	<5.0	<5.0	80.6	<5.0	<5.0	36.9
	3/17/2009	<5.0	<5.0	65.2	<5.0	<5.0	69.8
	6/17/2009	<5.0	<5.0	14.9	5.9	<5.0	137
	8/6/2009	<5.0	<5.0	16.7	<5.0	<5.0	248
	11/3/2009	<5.0	<5.0	8.5	<5.0	<5.0	168
	2/4/2010	<5.0	<5.0	<5.0	<5.0	<5.0	287
	4/22/2010	<5.0	<5.0	7.2	<5.0	<5.0	211
	7/21/2010	6.6	<5.0	271	8.1	<5.0	305
	10/13/2010	<5.0	<5.0	<5.0	<5.0	<5.0	16.2
	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	46.2
MMW-P-04	11/9/2005	180	<5.0	<5.0	<5.0	<5.0	<2.0
	2/22/2007	315	<5.0	<5.0	<5.0	<5.0	<2.0
	6/14/2007	268	<5.0	<5.0	<5.0	<5.0	<2.0
	9/20/2007	214	<5.0	<5.0	<5.0	<5.0	<2.0
	12/13/2007	62.0	<5.0	<5.0	<5.0	<5.0	<2.0
	3/20/2008	120	<5.0	<5.0	<5.0	<5.0	<2.0
	6/6/2008	154	6.0	59.7	<5.0	<5.0	<2.0
	9/11/2008	31.9	<5.0	360	7.1	<5.0	<2.0
	11/19/2008	45.0	<5.0	248	<5.0	<5.0	<2.0
	3/18/2009	19.4	5.4	304	10.8	<5.0	<2.0
	6/17/2009	35.3	5.4	827	22.0	<5.0	2.0
	8/6/2009	<5.0	<5.0	15.1	<5.0	<5.0	<2.0
	11/5/2009	<5.0	<5.0	1,190	36.9	<5.0	90.9
	2/12/2010	<5.0	<5.0	144	8.3	<5.0	224
	4/21/2010	<5.0	<5.0	268	15.8	<5.0	364
	7/22/2010	<5.0	<5.0	189	12.9	<5.0	402
	10/13/2010	<5.0	<5.0	10.3	<5.0	<5.0	16.8
	2/18/2011	<5.0	<5.0	6.4	<5.0	<5.0	36.3
MMW-P-05	11/8/2005	<5.0	<5.0	6.2	<5.0	<5.0	<2.0
	2/22/2007	23.7	<5.0	9.1	<5.0	<5.0	<2.0
	6/14/2007	<5.0	<5.0	18.8	<5.0	<5.0	<2.0
	9/19/2007	<5.0	<5.0	18.8	<5.0	<5.0	<2.0
	12/14/2007	<5.0	<5.0	14.8	<5.0	<5.0	<2.0
	3/20/2008	<5.0	<5.0	8.1	<5.0	<5.0	<2.0
	6/5/2008	<5.0	<5.0	15.6	<5.0	<5.0	<2.0
	9/11/2008	<5.0	<5.0	16.7	<5.0	<5.0	<2.0
	11/19/2008	<5.0	<5.0	22.1	<5.0	<5.0	<2.0
	3/17/2009	<5.0	<5.0	13.7	<5.0	<5.0	<2.0
	6/17/2009	<5.0	<5.0	10.9	6.6	<5.0	<2.0
	8/6/2009	<5.0	<5.0	15.1	<5.0	<5.0	<2.0
	11/3/2009	<5.0	<5.0	7.6	<5.0	<5.0	2.7
	2/4/2010	<5.0	<5.0	6.8	<5.0	<5.0	<2.0
	4/22/2010	<5.0	<5.0	8.6	<5.0	<5.0	<2.0
	7/21/2010	<5.0	<5.0	10.4	<5.0	<5.0	5.3
	10/13/2010	<5.0	<5.0	13.6	<5.0	<5.0	3.9
	1/20/2011	<5.0	<5.0	14.1	<5.0	<5.0	<2.0
IDEM RISC Industrial Default Cleanup Level - 2006		55	31	1,000	2,000	1,000	4
IDEM RISC Residential Default Cleanup Level - 2006		5	5	70	100	80	2

Notes:

All Values Over IDEM RISC Default Industrial Cleanup Level in **RED**

All Values Over IDEM RISC Default Residential Cleanup Level in **BLUE**

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

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All analytical results presented in micrograms per liter (ug/L).

**Table 3**  
**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MMW-P-06	11/8/2005	<5.0	<5.0	200	24.0	<5.0	21.0
	2/22/2007	<5.0	<5.0	158	19.2	<5.0	<2.0
	6/14/2007	<5.0	<5.0	214	22.7	<5.0	13.3
	9/19/2007	<5.0	<5.0	283	38.2	<5.0	26.1
	12/14/2007	<5.0	<5.0	260	40.0	<5.0	31.0
	3/20/2008	<5.0	<5.0	250	31.0	<5.0	26.0
	6/5/2008	<5.0	<5.0	265	30.9	<5.0	40.1
	9/11/2008	<5.0	<5.0	271	33.3	<5.0	<2.0
	11/19/2008	<5.0	<5.0	292	<5.0	<5.0	61.4
	3/17/2009	<5.0	<5.0	292	35.3	<5.0	<2.0
	6/17/2009	<5.0	<5.0	145	22.2	<5.0	90.6
	8/6/2009	<5.0	<5.0	136	14.3	<5.0	301
	11/3/2009	<5.0	<5.0	107	15.2	<5.0	292
	2/4/2010	<5.0	<5.0	79.1	11.2	<5.0	1,870
	4/22/2010	<5.0	<5.0	23.7	8.0	<5.0	2,470
	7/21/2010	<50.0	<50.0	<50.0	<50.0	<50.0	5,870
	10/14/2010	<100	<100	<100	<100	<100	12,900
	1/20/2011	<100	<100	2,700	<100	<100	15,000
MMW-P-07	2/22/2007	3,060	81.5	82.0	8.8	<5.0	<2.0
	6/14/2007	2,850	90.0	82.5	<50.0	<50.0	<20.0
	9/20/2007	5,200	109	121	16.1	<5.0	2.0
	12/13/2007	1,440	157	930	8.8	7.4	80.0
	3/21/2008	31	7.6	1,700	27.0	<5.0	110
	6/5/2008	<5.0	<5.0	938	15.6	<5.0	466
	9/11/2008	<5.0	<5.0	1,870	55.2	<5.0	1,620
	11/19/2008	<5.0	<5.0	797	<5.0	<5.0	749
	3/17/2009	<5.0	<5.0	361	17.7	<5.0	1,830
	6/17/2009	<5.0	<5.0	87.1	9.4	<5.0	1,130
	8/6/2009	<5.0	<5.0	48.7	<5.0	<5.0	787
	11/3/2009	<5.0	<5.0	809	14.1	<5.0	1,510
	2/4/2010	<5.0	<5.0	555	12.4	<5.0	1,880
	4/22/2010	<5.0	7.0	1,050	23.7	<5.0	2,080
	7/22/2010	<5.0	<5.0	247	7.8	<5.0	1,680
	10/14/2010	<25.0	<25.0	665	<25.0	<25.0	2,310
	1/20/2011	<5.0	<5.0	295	13.9	<5.0	562
MMW-P-08	2/22/2007	6,280	281	240	26.7	<5.0	<2.0
	6/14/2007	6,440	310	169	<50.0	<50.0	<20.0
	9/20/2007	9,780	494	201	25.3	<5.0	6.5
	12/14/2007	390	210	5,800	<50.0	<50.0	<20.0
	3/21/2008	6.7	11.0	6,500	130	<5.0	55.0
	6/5/2008	<5.0	<5.0	<5.0	<5.0	<5.0	562
	9/11/2008	5.8	5.0	18,300	686	<50.0	4,740
	11/19/2008	<50.0	<50.0	5,690	91.4	<50.0	13,000
	3/17/2009	<5.0	<5.0	1,130	47.1	<5.0	5,680
	6/17/2009	<125	<125	356	145	<5.0	7,200
	8/6/2009	<125	<125	601	<50.0	<50.0	8,960
	11/3/2009	<50.0	<50.0	86.7	<50.0	<50.0	2,860
	2/4/2010	<50.0	<50.0	1,140	<50.0	<50.0	4,860
	4/22/2010	<5.0	<5.0	45.7	8.1	<5.0	2,180
	7/22/2010	<5.0	<5.0	97.8	<5.0	<5.0	1,320
	10/14/2010	<25.0	<25.0	39.5	<25.0	<25.0	676
	1/20/2011	<5.0	<5.0	590	14.8	<25.0	1,770
MMW-P-09S	2/22/2007	10.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/14/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	9/19/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	12/12/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	3/20/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/5/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	9/11/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	11/19/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	3/17/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/16/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	8/6/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	11/3/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	2/3/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	7/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	10/13/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
IDEM RISC Industrial Default Cleanup Level - 2006		55	31	1,000	2,000	1,000	4
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Notes:

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PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

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**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MMW-P-09D	6/14/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<b>46.2</b>
	9/19/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<b>83.1</b>
	12/12/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<b>71.0</b>
	3/20/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>3.0</b>
	6/5/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>100</b>
	9/11/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>72.6</b>
	11/19/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>97.2</b>
	3/17/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>85.1</b>
	6/16/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>73.5</b>
	8/6/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>80.8</b>
	11/3/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>87.1</b>
	2/3/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>111</b>
	4/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>76.9</b>
	7/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>81.2</b>
	10/13/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>70.6</b>
	1/19/2011	<5.0	<5.0	<5.0	<5.0	<5.0	<b>66.9</b>
MMW-P-10S	6/14/2007	<b>36.1</b>	<b>36.3</b>	61.6	6.9	<5.0	<2.0
	7/6/2007	<b>87.9</b>	<b>54.9</b>	<b>92.1</b>	10.2	<5.0	<2.0
	9/19/2007	<b>192</b>	<b>82.6</b>	<b>126</b>	14.4	<5.0	<2.0
	12/14/2007	<b>71.0</b>	<5.0	<5.0	<5.0	<5.0	<b>2.4</b>
	3/20/2008	<b>26.8</b>	<b>19.2</b>	<b>250</b>	12.2	<5.0	<2.0
	6/5/2008	<b>15.0</b>	<b>9.7</b>	<b>537</b>	16.0	<5.0	<b>114</b>
	9/11/2008	<b>74.8</b>	<b>36.5</b>	<b>1,650</b>	74.0	<5.0	<b>27.7</b>
	11/19/2008	<b>78.6</b>	<b>28.0</b>	<b>1,510</b>	<5.0	<5.0	<b>22.3</b>
	3/17/2009	<b>11.9</b>	<b>8.6</b>	<b>1,160</b>	71.5	<5.0	<2.0
	6/17/2009	<5.0	<5.0	<b>331</b>	20.5	<5.0	<b>63.9</b>
	8/6/2009	<5.0	<5.0	<b>158</b>	16.1	<5.0	<b>395</b>
	11/3/2009	<5.0	<5.0	29.6	<5.0	<5.0	<b>288</b>
	2/4/2010	<5.0	<5.0	45.4	<5.0	<5.0	<b>419</b>
	4/22/2010	<5.0	<5.0	16.2	<5.0	<5.0	<b>118</b>
	7/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>16.5</b>
	10/14/2010	<5.0	<5.0	5.4	<5.0	<5.0	<b>381</b>
	1/20/2011	<5.0	<5.0	11.7	<5.0	<5.0	<b>27.8</b>
MMW-P-10D	6/14/2007	<5.0	<b>10.6</b>	<b>481</b>	7.7	<5.0	<b>98.7</b>
	7/6/2007	<5.0	<5.0	<b>498</b>	9.0	<5.0	<b>118</b>
	9/19/2007	<5.0	<5.0	<b>350</b>	<5.0	<5.0	<b>76.1</b>
	12/14/2007	<5.0	<5.0	<b>270</b>	<5.0	<5.0	<b>77.0</b>
	3/20/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>3.0</b>
	6/5/2008	<5.0	<5.0	<b>508</b>	<5.0	<5.0	<b>267</b>
	9/11/2008	<5.0	<5.0	<b>435</b>	<5.0	<5.0	<b>288</b>
	11/19/2008	<5.0	<5.0	<b>3,390</b>	<5.0	<5.0	<b>5,030</b>
	3/17/2009	<5.0	<5.0	<b>4,860</b>	12.9	<5.0	<b>2,500</b>
	6/17/2009	<5.0	<5.0	<b>3,710</b>	9.6	<5.0	<b>9,070</b>
	8/6/2009	<5.0	<5.0	<b>2,520</b>	5.1	<5.0	<b>3,400</b>
	11/3/2009	<5.0	<5.0	<b>2,740</b>	<5.0	<5.0	<b>3,500</b>
	2/4/2010	<5.0	<5.0	<b>406</b>	<5.0	<5.0	<b>2,130</b>
	4/22/2010	<5.0	<5.0	30.5	<5.0	<5.0	<b>364</b>
	7/22/2010	<5.0	<5.0	120	<5.0	<5.0	<b>865</b>
	10/14/2010	<25.0	<25.0	<25.0	<25.0	<25.0	<b>707</b>
	1/20/2011	<5.0	<5.0	21.4	<5.0	<5.0	<b>1,210</b>
<b>Keramida/Environ Monitoring Wells (Off-site)</b>							
MW-165D	7/7/2010	<5.0	<5.0	<b>122</b>	<5.0	<5.0	<b>202</b>
MW-167S	11/7/2005	<5.0	<5.0	<5.0	<5.0	<5.0	<b>14.0</b>
	6/5/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/17/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MW167D	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	11/7/2005	<5.0	<5.0	<b>750</b>	<5.0	<5.0	<b>110</b>
	6/5/2008	<5.0	<5.0	<b>616</b>	28.0	<5.0	<b>43.8</b>
	6/17/2009	<5.0	<5.0	<b>612</b>	22.1	<5.0	<b>23.8</b>
	4/21/2010	<5.0	<5.0	<b>626</b>	22.1	<5.0	<b>25.6</b>
MW-168S	11/7/2005	<b>280</b>	<b>16.0</b>	53.0	<5.0	<5.0	<b>3.0</b>
	2/21/2007	<b>30.1</b>	<b>8.8</b>	<b>155</b>	<5.0	<5.0	<b>29.6</b>
	6/14/2007	<5.0	<5.0	40.8	<5.0	<5.0	<b>34.0</b>
	9/19/2007	<b>32.6</b>	<b>8.0</b>	<b>82.4</b>	<5.0	<5.0	<b>3.5</b>
	12/13/2007	<b>52.0</b>	<b>14.0</b>	<b>78.0</b>	<5.0	<5.0	<b>4.1</b>
	3/20/2008	<b>92.0</b>	<b>12.0</b>	46.0	<5.0	<5.0	<b>4.2</b>
	6/5/2008	<b>80.4</b>	<b>10.1</b>	41.1	<5.0	<5.0	<b>3.6</b>
	9/11/2008	<b>68.5</b>	<b>10.8</b>	66.9	<5.0	<5.0	<b>5.5</b>
	8/7/2009	<b>62.6</b>	<b>10.2</b>	<b>118</b>	<5.0	NS	<b>9.9</b>
	4/21/2010	<b>14.0</b>	<b>7.0</b>	21.9	<5.0	<5.0	<2.0
IDEM RISC Industrial Default Cleanup Level - 2006		<b>55</b>	<b>31</b>	<b>1,000</b>	<b>2,000</b>	<b>1,000</b>	<b>4</b>
IDEM RISC Residential Default Cleanup Level - 2006		<b>5</b>	<b>5</b>	<b>70</b>	<b>100</b>	<b>80</b>	<b>2</b>

Notes:

All Values Over IDEM RISC Default Industrial Cleanup Level in **RED**

All Values Over IDEM RISC Default Residential Cleanup Level in **BLUE**

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

Green Shading indicates areas that appear to be undergoing reductive dechlorination due to CAP-18 Injections

"J" designation indicates concentration was estimated due to high concentration of one parameter requiring dilution on other parameter quantitations

All analytical results presented in micrograms per liter (ug/L).

**Table 3**  
**Cumulative Monitoring Well Groundwater Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Well ID	Sample Date	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Chloroform	Vinyl chloride
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
MW-168D	11/7/2005	<5.0	<5.0	6.8	<5.0	<5.0	<b>49.0</b>
	2/21/2007	<5.0	<5.0	8.4	<5.0	<5.0	<b>58.1</b>
	6/14/2007	<5.0	<5.0	5.2	<5.0	<5.0	<b>47.5</b>
	9/19/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<b>89.7</b>
	12/12/2007	<5.0	<5.0	<5.0	<5.0	<5.0	<b>74.0</b>
	3/20/2008	<5.0	<5.0	8.0	<5.0	<5.0	<b>39.0</b>
	6/5/2008	<5.0	<5.0	13.4	<5.0	<5.0	<b>65.9</b>
	9/11/2008	<5.0	<5.0	5.5	<5.0	<5.0	<2.0
	3/17/2009	<5.0	<5.0	16.5	<5.0	<5.0	<2.0
	6/18/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>14.5</b>
	8/7/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>36.2</b>
	11/4/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>99.1</b>
	2/4/2010	<5.0	<5.0	6.3	<5.0	<5.0	<b>128</b>
	4/21/2010	<5.0	<5.0	13.2	<5.0	<5.0	<b>134</b>
MW-169S	7/22/2010	<5.0	<5.0	6.0	<5.0	<5.0	<b>122</b>
	10/13/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>134</b>
	11/7/2005	<5.0	<5.0	<5.0	<5.0	NA	<2.0
	6/5/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MW-169D	11/7/2005	<5.0	<5.0	<5.0	<5.0	NA	<b>5.1</b>
	6/5/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>14.3</b>
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>6.1</b>
MW-170S	6/3/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>5.5</b>
	6/17/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MW-170D	6/3/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>230</b>
	6/17/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>174</b>
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>161</b>
	7/7/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>233</b>
MW-171S	6/3/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
MW-171D	6/3/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<b>3.0</b>
	6/16/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<b>2.2</b>
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<b>6.3</b>
	7/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
<b>Floral Park Cemetery Wells (Off-site)</b>							
MMW-C-01	11/20/2008	<b>15.7</b>	<b>8.3</b>	<b>296</b>	<5.0	<5.0	<2.0
	3/17/2009	<5.0	<5.0	<b>508</b>	7.3	<5.0	<2.0
	6/18/2009	<b>23.2</b>	<5.0	<5.0	<5.0	<5.0	<2.0
	8/6/2009	<b>84.8</b>	<5.0	66.9	<5.0	<5.0	<b>35.2</b>
	11/3/2009	<b>12.6</b>	<5.0	<b>211</b>	8.9	<5.0	<b>2,720</b>
	2/3/2010	<5.0	<5.0	<b>176</b>	10.1	<5.0	<b>1,790</b>
	4/21/2010	<b>15.3</b>	<5.0	<b>165</b>	7.1	<5.0	<b>1,660</b>
	7/22/2010	<b>40.9</b>	<5.0	22.4	<5.0	<5.0	<b>8.1</b>
	10/14/2010	<5.0	<5.0	69.1	<5.0	<5.0	<b>1,100</b>
	1/19/2011	<5.0	<5.0	14.7	<5.0	<5.0	<b>215</b>
MMW-C-02	11/20/2008	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	3/17/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	6/18/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	8/6/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	11/3/2009	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	2/3/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	4/21/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
	7/22/2010	<5.0	<5.0	<5.0	<5.0	<5.0	<2.0
IDEM RISC Industrial Default Cleanup Level - 2006		<b>55</b>	<b>31</b>	<b>1,000</b>	<b>2,000</b>	<b>1,000</b>	<b>4</b>
	IDEM RISC Residential Default Cleanup Level - 2006	<b>5</b>	<b>5</b>	<b>70</b>	<b>100</b>	<b>80</b>	<b>2</b>

Notes:

All Values Over IDEM RISC Default Industrial Cleanup Level in **RED**

All Values Over IDEM RISC Default Residential Cleanup Level in **BLUE**

PCE = Tetrachloroethene; TCE = Trichloroethene; cis-1,2-DCE = cis-1,2-Dichloroethene; trans-1,2-DCE = trans-1,2-Dichloroethene

Green Shading indicates areas that appear to be undergoing reductive dechlorination due to CAP-18 Injections

"J" designation indicates concentration was estimated due to high concentration of one parameter requiring dilution on other parameter quantitations

All analytical results presented in micrograms per liter (ug/L).

Conductivity	Nitrogen, Nitrate	Sulfate	Acetic Acid	Butyric Acid	Hex- anoic Acid	Ac-
Michigan Plaza						
Indianapolis, Indiana						
MUNDELL Job No.: M01046						

Conductivity	Nitrogen, Nitrate	Sulfate	Acetic Acid	Butyric Acid	Hex Acid
MUNDELL Job No.: M01046	Indianapolis, Indiana	Michigan Plaza	Indiana	Michigan	Illinois

Conductivity	Nitrogen, Nitrate	Sulfate	Acetic Acid	Butyric Acid	Hex- anoic Acid	Ac-
Michigan Plaza						
Indianapolis, Indiana						
MUNDELL Job No.: M01046						

Table 4 Actual Data for Enhanced Anaerobic Bioremediation Initial Attenuation Indicator Parameters	Michigan Plaza Indianapolis, Indiana	DELL Job No.: M01046			
n, %	Sulfate	Acetic Acid	Butyric Acid	Hexa- Acid	Ac-
100	100	100	100	100	100

**Table 4**  
**Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation**  
**Monitored Natural Attenuation Indicator Parameters**  
**Michigan Plaza**

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation														
Monitored Natural Attenuation Indicator Parameters														
Michigan Plaza Indianapolis, Indiana MUNDELL Job No.: M01046														
Well ID	Sample Date	pH	Dissolved Oxygen ug/L	Oxidation Reduction Potential mV	Conductivity us/cm	Nitrogen, Nitrate mg/L	Sulfate Acidic Acid	Butyric Acid	Hexanoic Acid	i-Hexanoic Acid	Isobutyric Acid and HIBA	Propionic Acid	Ethane	Methane ug/L
FIELD MEASUREMENTS														
MMW-P-06	3/20 & 3/21/2008	7.1	29	900	4293.5	62.6								
	6/5 & 6/6/2008	6.8			<0.10	<0.10	60/0.00	1,700	<0.100	0.210	1,200	29,000	0.440	
	9/11/2008	6.8			0.7		30/5				1,400		0.47	
	11/19/2008	6.9	715		<0.10		39/1							
	3/17/2009	6.7	1,063	710	3884.4	<0.10	30/0							
	6/17/2009				<0.10		9.4							
	8/6/2009				<0.10		61/7							
	11/3/2009	6.9	1,631	-105	1276.4	<0.10	29/7							
	2/4/2010	7.0	725	-86	927.1	<0.10	73/2							
	4/22/2010	6.9	1,405	-106	1129.2	0.10	10/3							
MMW-P-07	7/21/2010	7.0	2,001	-112	1448.3	<0.10	15/3							
	10/14/2010	6.9	162	-121	1194.9		38/7							
	1/20/2011	6.8	1,062		1263.5	<0.10	12/3							
	3/21/2008		9	937	6955.8		65/8							
	6/7/2008		1200		6927.7		59/27							
	9/11/2008	6.7			59/27		0.7							
	11/19/2008	6.5	846											
	3/17/2009	6.8	880		745	40/22.3								
	11/3/2009	6.6	1,745	-72	2234.1									
	2/4/2010	6.7	721	-92	1800.3									
MMW-P-08	4/22/2010	6.7	1,400	-154	1924.8									
	7/22/2010	6.6	3,369	-55	1605.5									
	10/14/2010	6.6	359	-148	2187.6									
	1/20/2011	6.7	1,377		2187.6									
	3/20 & 3/21/2008	2.3	245		1317.0									
	6/5 & 6/6/2008	7.0			3645.7	129/0								
	9/10 & 9/11/2008	7.3	467	0.3	1118.2	0.12	<5.0							
	11/19/2008	7.0	1,129		<0.10	<0.10								
	3/17/2009	6.8	876	674	4083.5	<0.10	7/2							
	6/17/2009				<0.10		5.1							
MMW-P-09S	8/6/2009				<0.10		5.0							
	11/3/2009	6.5	1,676	-74	1547.6	<0.10	38/3							
	2/4/2010	6.6	631	-86	1629.4	<0.10	23/6							
	4/22/2010	6.7	1,408	-202	1804.3	<0.10	8.5							
	7/22/2010	6.8	3,934	-70	939.3	<0.10	34.0							
	10/14/2010	6.7	395	-175	1923.7	<0.10	45.7							
	1/20/2011	6.8	1,907		1965.5	<0.10	21.0							
	3/20/2008	2.5	230		3920.3	1.50	78.7							
	6/5 & 6/6/2008	7.0			963.6	5.10	16/10							
	9/10 & 9/11/2008	7.1	200	0.3	<0.10	114.0								
MMW-P-09S	11/19/2008	7.1	1,08		<0.10		133.0							
	3/17/2009	6.5	1,019	858	229.3	0.72	82.4							
	6/16/2009					1.10	64.0							
	8/7/2009					0.60	45.7							
	11/3/2009	6.9	2,892	174	810.2	0.78	87.2							
	2/3 & 2/4/2010	6.9	3,997	-51	646.1	0.62	85.8							
	4/22/2010	7.1	2,699	69	701.4	0.62	44.8							
	7/22/2010	7.0	5,477	27	1077.9	0.80	92.4							
	10/15/2010	6.6	1,026	-105	725.6	0.10	57.4							
	11/9/2011	6.6	1,732		711.5	0.10	106.0							

Conductivity	Nitrogen, Nitrate	Sulfate	Acetic Acid	Butyric Acid	Hex- ane	Ac-
Michigan Plaza Indianapolis, Indiana MUNIDLL Job No.: M01046						

Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation												
Monitored Natural Attenuation Indicator Parameters												
Michigan Plaza Indianapolis, Indiana MUNDELL Job No.: M01046												
Well ID	Sample Date	pH	Dissolved Oxygen mg/L	Oxidation Reduction Potential mV	Conductivity µS/cm	Nitrogen, Nitrate mg/L	Sulfate mg/L	Acetic Acid mg/L	Butyric Acid mg/L	Hexanoic Acid mg/L	i-Pentanoic Acid mg/L	Propionic Acid mg/L
FIELD MEASUREMENTS												
MW-P-09D	3/20/2008	7.4	107			8894.3						
	6/7/2008	6.9	443			3784.4						
	11/19/2008	6.6	1,006			NS						
	3/17/2009	6.6	819			834						
	11/3/2009	7.1	1,717	-59		2616.0						
	2/3/2010	7.1	4,243	-78		897.8						
	4/22/2010	7.1	1,360	-64		862.0						
	7/22/2010	7.2	3,702	-59		884.7						
	10/15/2010	7.1	694	-282		929.0						
	1/19/2011	6.1	1,079			788.7						
MW-P-10S	3/20/2008	1.7				4589.7	50.8					
	6/5, 6/6 & 6/7/2008	1.7				3508.2	<0.10					
	9/11/2008	7.0	45			0.4	<0.10					
	11/19/2008	6.9	1,034			111.0						
	3/17/2009	6.8	863			653	<0.10					
	6/17/2009					3958.2	<0.10					
	8/6/2009					54.6	<0.10					
	11/3/2009	6.8	1,566	-112		705.5	<0.10					
	2/4/2010	6.7	614	-93		1663.5	<0.10					
	4/22/2010	7.0	1,564	-200		971.3	<0.10					
MW-P-10D	7/21/2010	6.9	1,368	-105		900.8	<0.10					
	10/14/2010	6.6	404	-154		1681.7	<0.10					
	1/20/2011	6.7	1,02			1009.0	0.12					
	6/7/2008	1.7	1,134			4183.6						
	3/17/2009	6.6	838			574						
	11/3/2009	6.8	1,699	-98		2733.7						
	2/4/2010	6.8	619	-101		1104.1						
	4/22/2010	7.1	1,371	-192		992.6						
	7/22/2010	6.8	2,694	-27		857.0						
	10/14/2010	6.7	351			913.1						
MW-16SD	1/20/2011	6.7	1,155			1341.4						
	7/7/2010					1338.7						
	4/21/2010	6.9	173			102	1212.3					
	6/7/2008	0.1	454			2800.6						
	*MW-167D		163			803.3						
	4/21/2010	7.2				64						
	3/20/2008						2.20					
	6/5 & 6/6/2008	6.8					1395.0	251.0				
	9/11/2008	6.6					5.80	190.0	0.120			
	4/22/2010						1.10	6.8				
MW-168S	3/20/2008						<0.10					
	6/5/2008	6.9					0.072					
	11/3/2009	6.8					<0.050					
	2/4/2010						<0.070					
	4/22/2010						<0.050					
	7/7/2009						<0.070					
	11/3 & 11/4/2009	6.8					<0.050					
	2/4/2010	6.9					<0.10					
	4/21/2010	6.9					0.49					
	7/7/2010	6.9					941.8					
MW-168D	11/3/2009	6.6					53	1128.5	<0.10			
	4/21/2010						-53	1194.6	<0.10			
	7/7/2010	6.8					350	1184.4	<0.10			
	4/21/2010	7.1					228	848.4				
	6/5/2008	6.9					-49	848.4				
	9/11/2008						1283.4	<0.10				
	11/20/2008	6.9					51.0	114.0				
	4/21/2010	6.9					504	3318.8	<0.10			
	7/7/2010	6.9					795	2948.1	1.10			
	10/15/2010							43.0				
*MW-167S	11/3/2009	6.8					<0.10					
	2/4/2010						0.072					
	4/21/2010						<0.050					
	7/7/2010						<0.070					
	10/15/2010						<0.050					
	11/3 & 11/4/2009	6.8					<0.070					
	2/4/2010						<0.050					
	4/21/2010						<0.070					
	7/7/2010						<0.050					
	10/15/2010						<0.050					

Table 4 Cumulative Groundwater Analytical Data for Enhanced Anaerobic Bioremediation											
Monitored Natural Attenuation Indicator Parameters											
Michigan Plaza Indianapolis, Indiana											
MUNDELL Job No.: MBL046											
Well ID	Sample Date	pH	Dissolved Oxygen mg/L	Oxidation Reduction Potential	Conductivity mV	Conductivity 1/5cm	Nitrogen, Nitrate	Sulfate	Acetic Acid	Fatty Acid	i-Hexanoic Acid
FIELD MEASUREMENTS											
mg/L											
LAB RESULTS											
mg/L											
*MW-169D	6/7/2008	7.1	207	-53	3534.6						
*MW-170S	6/3/2008	7.1	187	1437.8							
*MW-170D	4/21/2010	7.0	162	90	1489.9						
*MW-171S	6/7/2008	7.1	190	87	148.6						
*MW-171D	4/21/2010	7.1	171	16	2714.6						
	7/22/2010	7.1	4,607	-47	346.3						
	9/10/2008	7.5	477	0.3	1001.9						
	11/20/2008	6.8	491	480	2907.9						
	3/17/2009	6.6	770	693	2702.0						
MMW-C-01	11/3/2009	6.9	1,765	-100	98.5						
	2/3/2010	6.9	3,818	-59	258.5						
	4/21/2010	7.1	174	57	223.4						
	7/22/2010	7.0	5,588	47	792.0						
	10/15/2010	6.9	3,883	-29	334.6						
	11/19/2011	6.8	1,522	741.5							
	11/20/2008	7.0	931	476	2806.7						
	3/17/2009	6.6	811	867	2506.9						
MMW-C-02	1/5/2009	6.8	1,811	24	2784.9						
	2/3/2010	6.8	3,782	76	778.9						
	4/21/2010	6.9	177	202	786.3						
	7/22/2010	6.9	2,670	30	755.8						
	10/15/2010	6.8	212	-175	717.4						
	11/19/2011	6.6	1,651	0.14	76.8	0.039J	<0.050	<0.050	<0.150	<0.050	<0.150

Notes:

Sampling locations outlined in GREEN have been identified as "Indicator Compound Locations". These locations will be sampled quarterly for VOCs, Nitrate/Nitrite, Sulfide, Methane/Ethane, Volatile Fatty Acids and Ferrous Iron, beginning 2nd Quarter 2011.

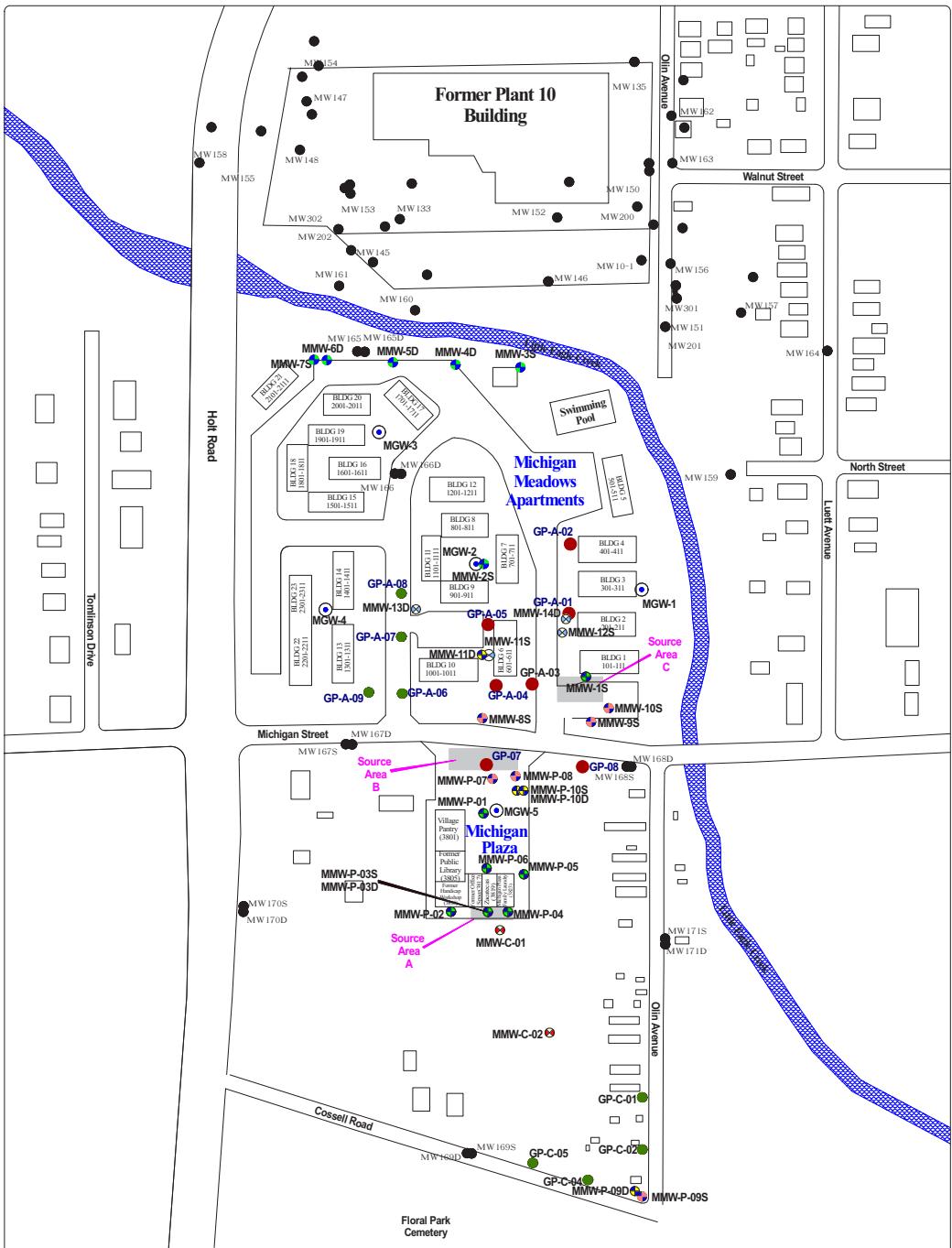
Grey shading indicates that no data is available. Lack of data is generally due to equipment malfunction in the field or absence of the parameter from the quarterly sampling plan.

\* Indicates sampling locations at the live sampling and ANNUAL basis. All other sampling locations are sampled quarterly.

J Shaded values indicate an estimated value.

B Dashed values indicate a value detected in a think sample.

## **FIGURES**



### LEGEND

- Fence
- MW 160 Keramida/Enviro Monitoring Wells
- MMW-P-06 MUNDELL Monitoring Wells, Michigan Plaza (September 2005)
- MMW-P-07 MUNDELL Monitoring Wells (January 2007)
- MMW-P-08D MUNDELL Monitoring Wells (May-June 2007)
- MMW-C-01 MUNDELL Monitoring Wells (July/August 2008)
- MMW-11S MUNDELL Monitoring Wells (November/December 2008)
- GP-C-05 MUNDELL Soil Boring Locations (January 2007)
- GP-07 MUNDELL Soil Boring Locations (September 2005)
- MGW-1 MUNDELL Soil Gas Well

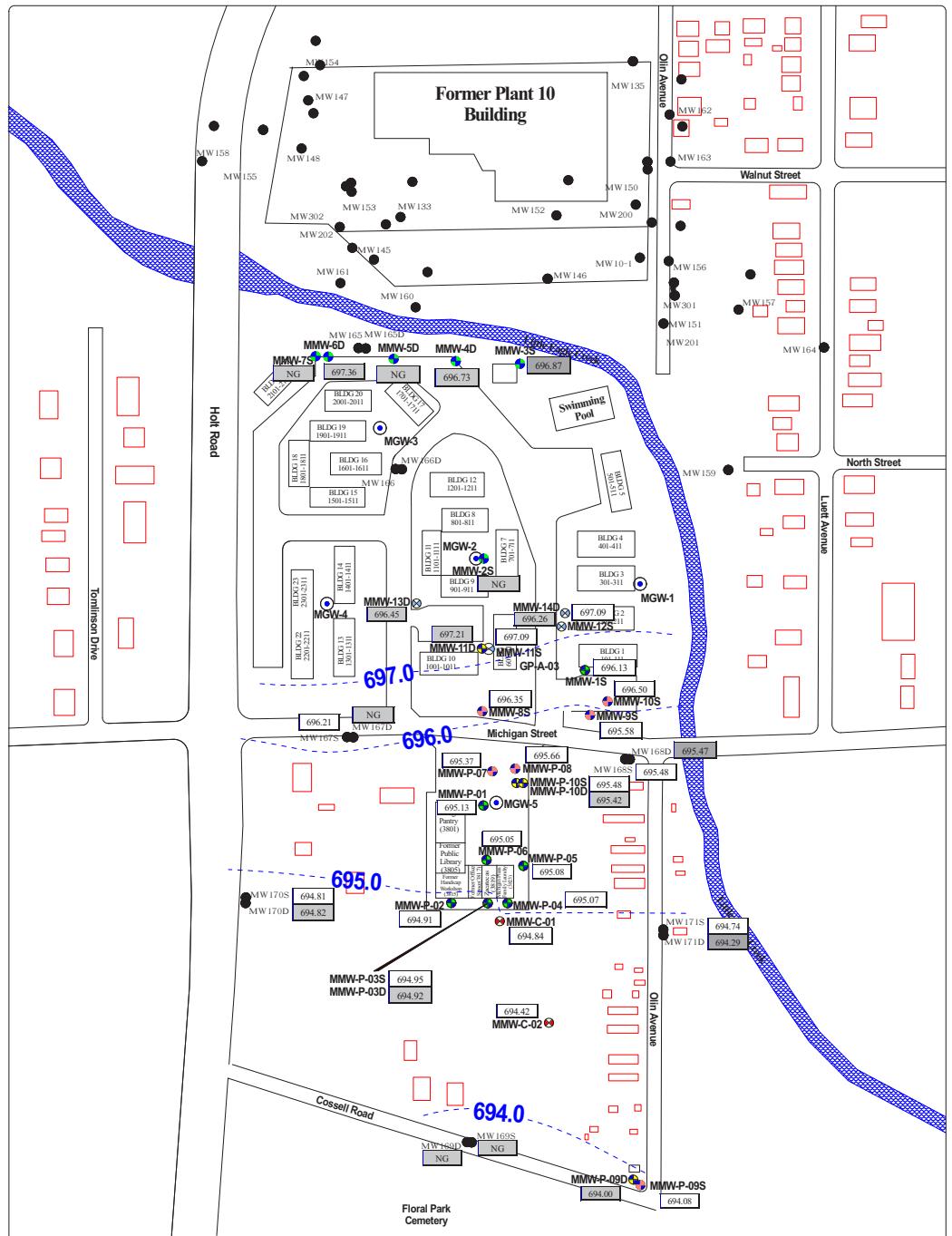


Keramida Monitoring Well Locations Referenced  
from Keramida Environmental, Inc.  
Project No. 2829  
March 13, 2002

### Site Plan

Michigan Plaza  
3801 - 3823 West Michigan Street  
Indianapolis, Indiana

FIGURE  
**1**



### LEGEND

- Fence
- MW 160 Keramida/Enviro Monitoring Wells
- MMW-P-06 MUNDELL Monitoring Wells, Michigan Plaza (September 2005)
- MMW-P-07 MUNDELL Monitoring Wells (January 2007)
- MMW-P-08D MUNDELL Monitoring Wells (May-June 2007)
- MMW-C-01 MUNDELL Monitoring Wells (July/August 2008)
- MMW-11S MUNDELL Monitoring Wells (November/December 2008)
- MGW-1 MUNDELL Soil Gas Well

697.0

Water Level as Measured on January 17, 2011  
(gray boxes indicate groundwater elevation values  
not used for the creation of the Shallow  
Potentiometric Surface Map)

NG - Not Gauged  
Potentiometric Surface Equipotential Lines

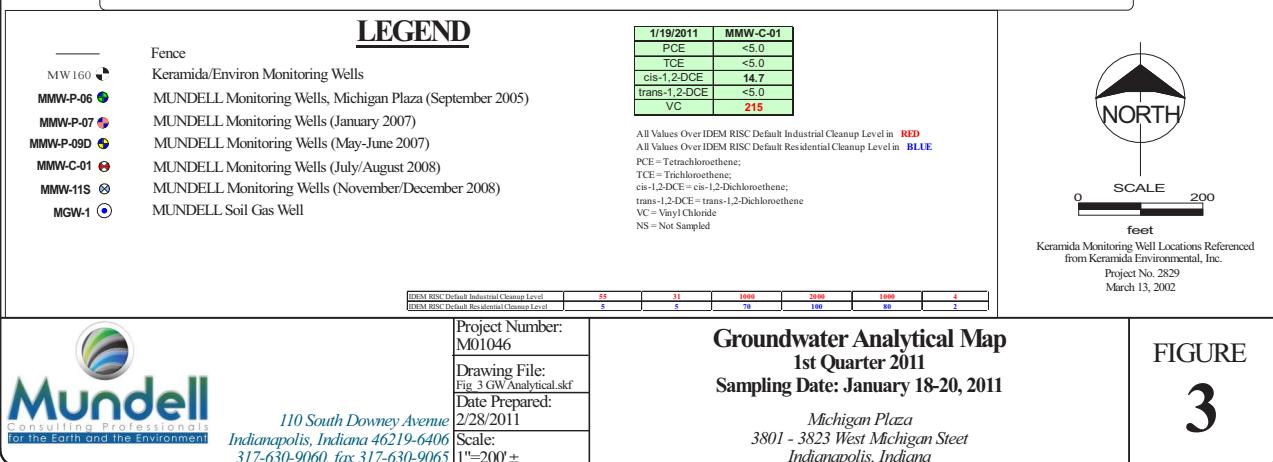
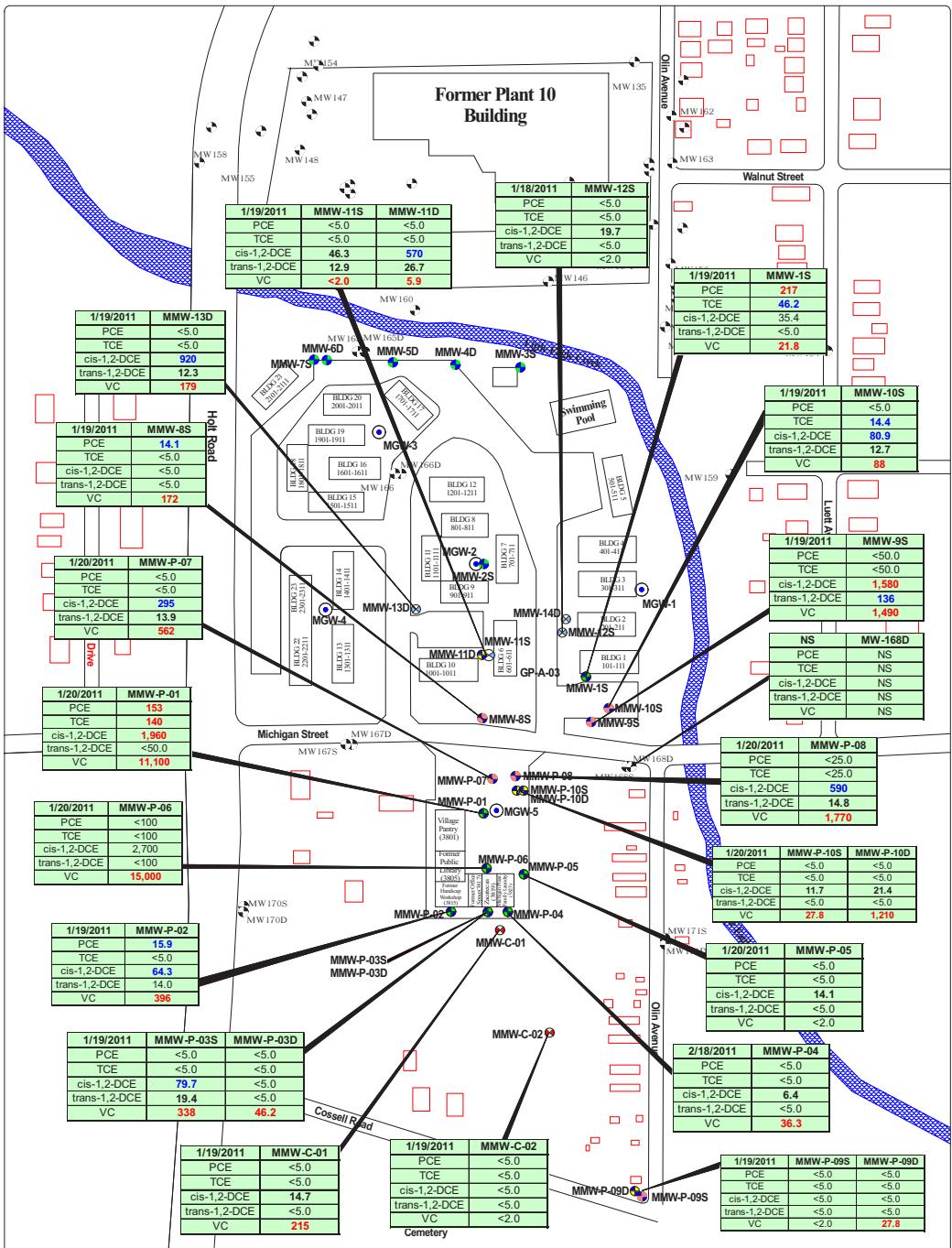


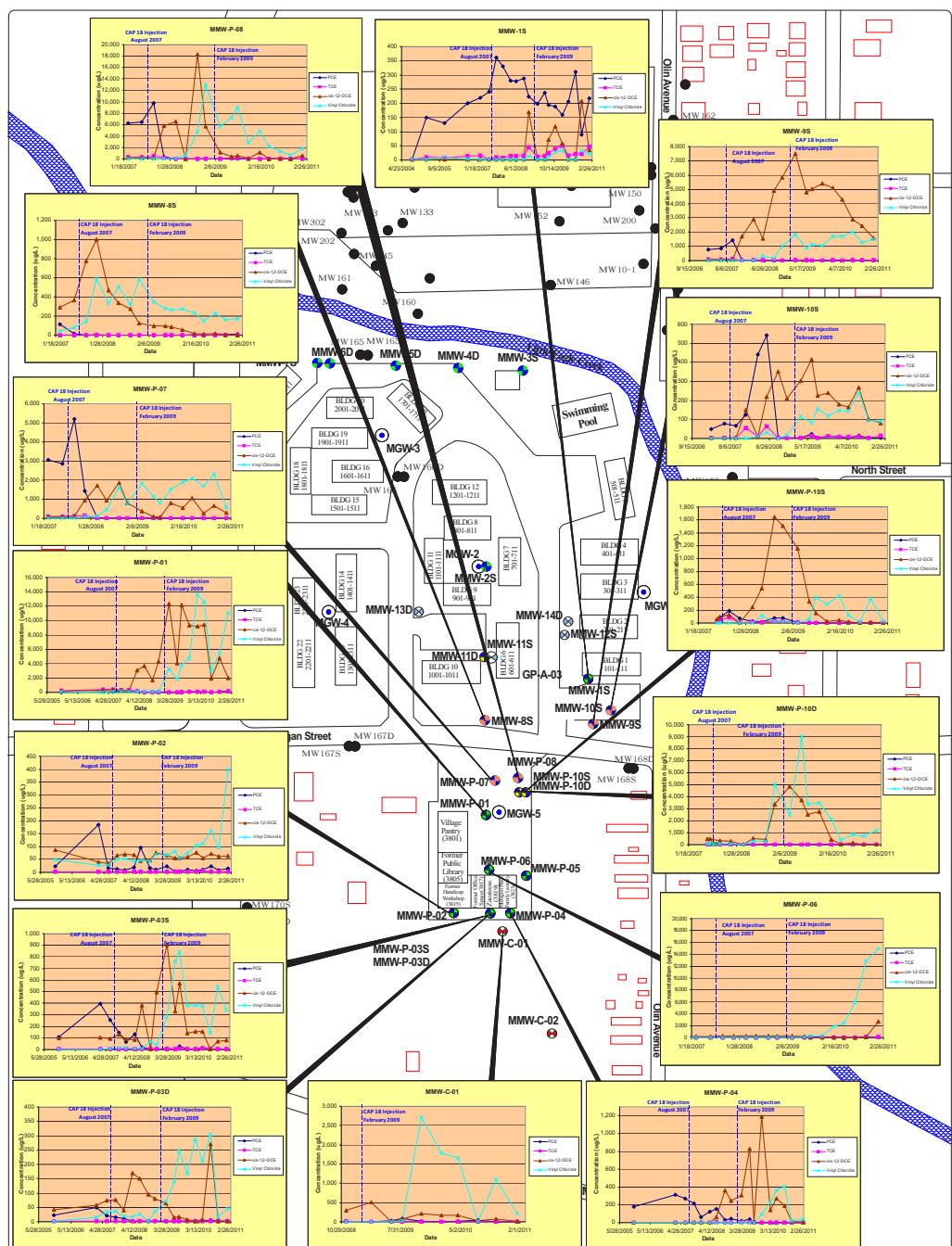
SCALE 200  
feet

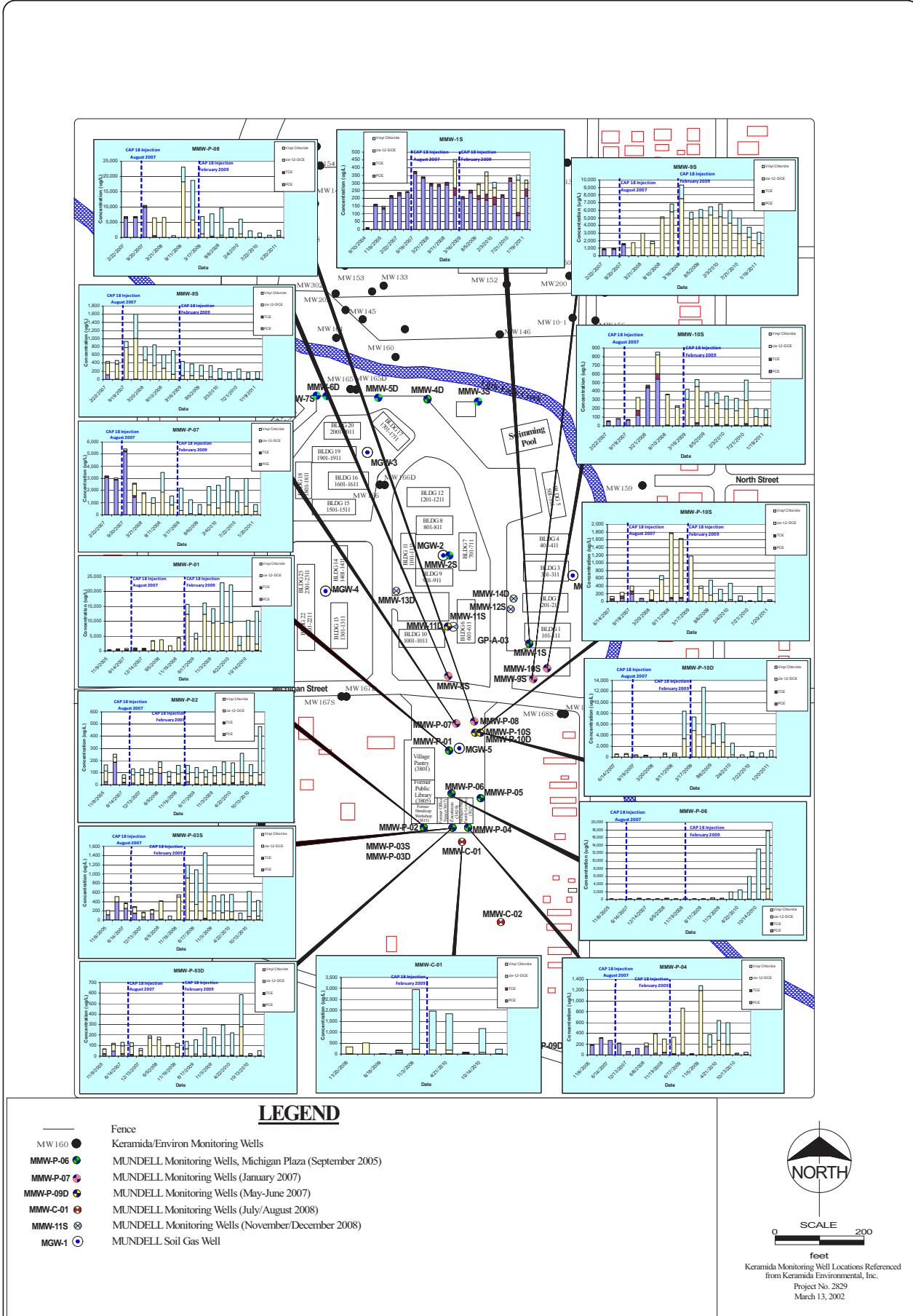
Keramida Monitoring Well Locations Referenced  
from Keramida Environmental, Inc.  
Project No. 2829  
March 13, 2002

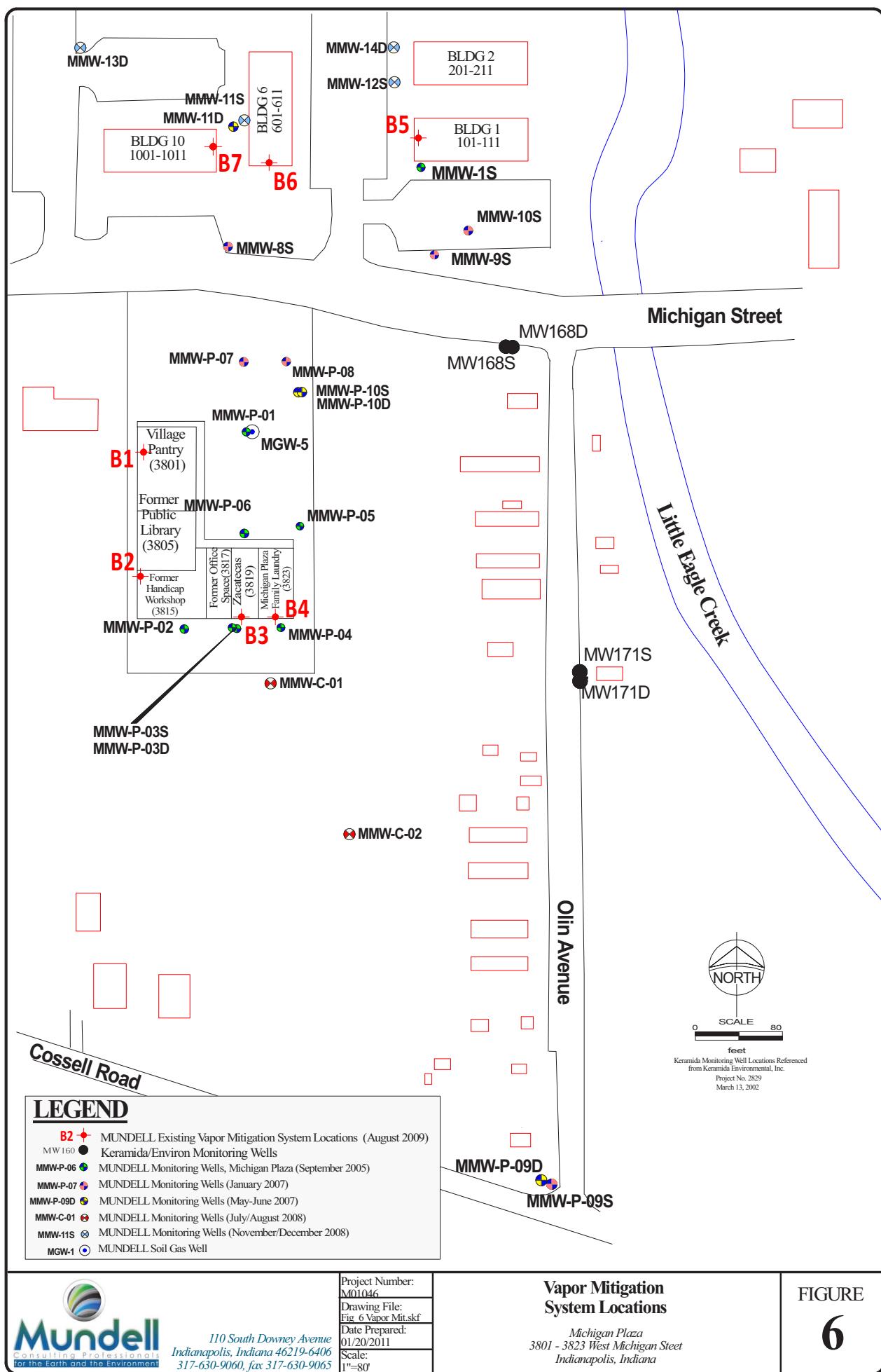
### Shallow Potentiometric Surface Map January 17, 2011

Michigan Plaza  
3801 - 3823 West Michigan Street  
Indianapolis, Indiana

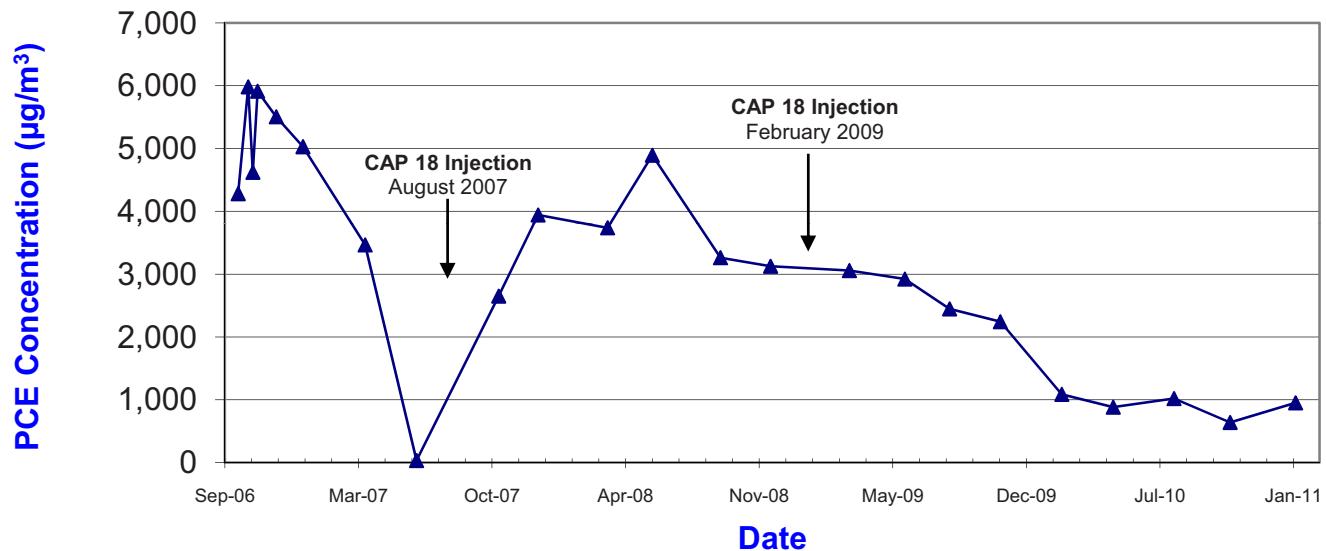




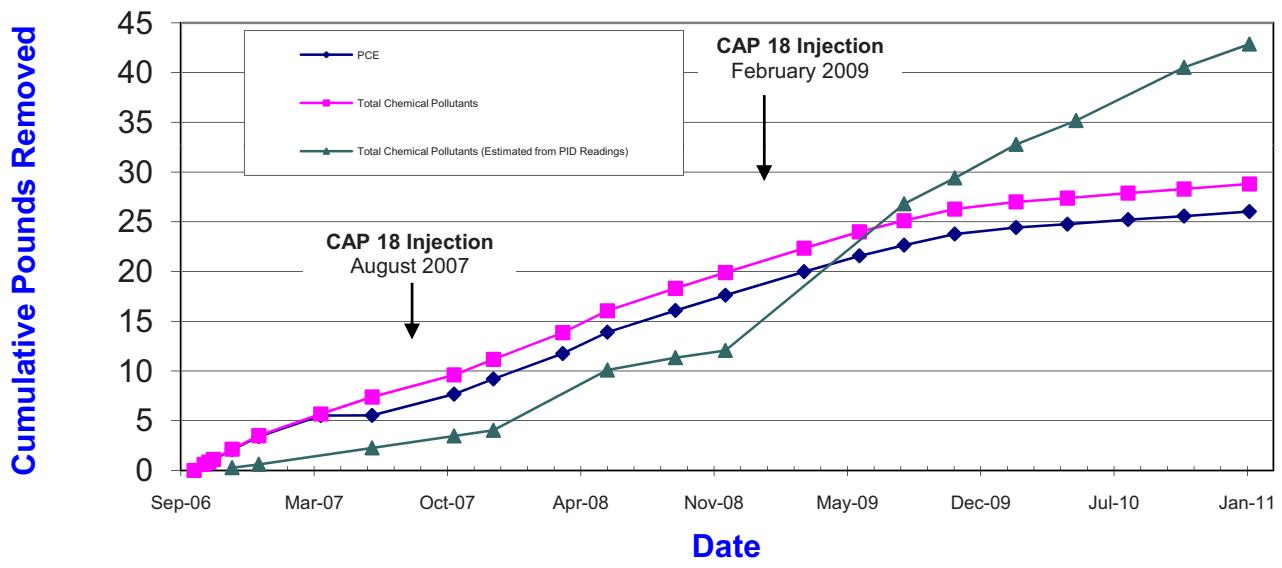




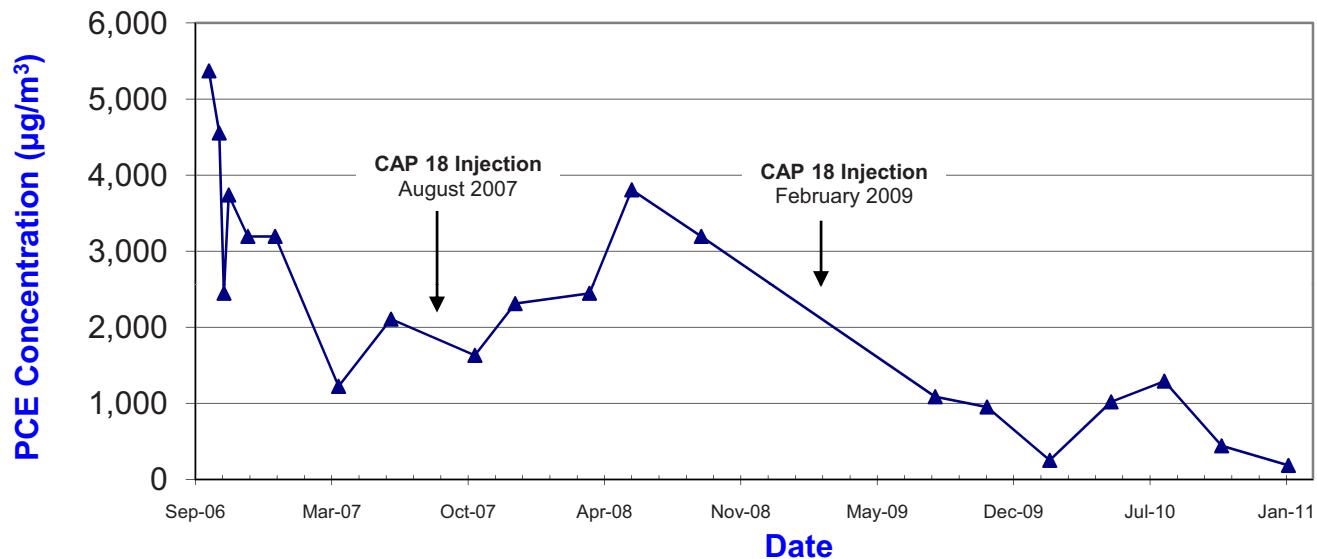
**PCE Vapor Concentrations Trend -  
Village Pantry Vapor Mitigation System (B1)**



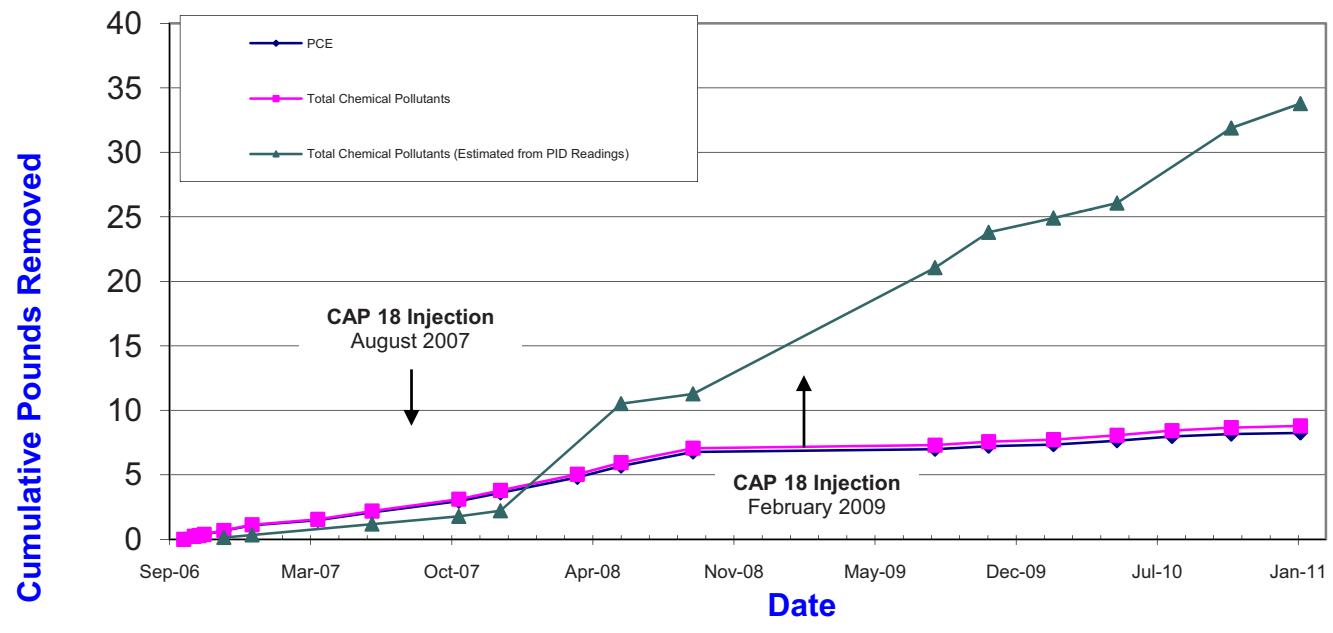
**Chemical Pounds Removed -  
Village Pantry Vapor Mitigation System (B1)**



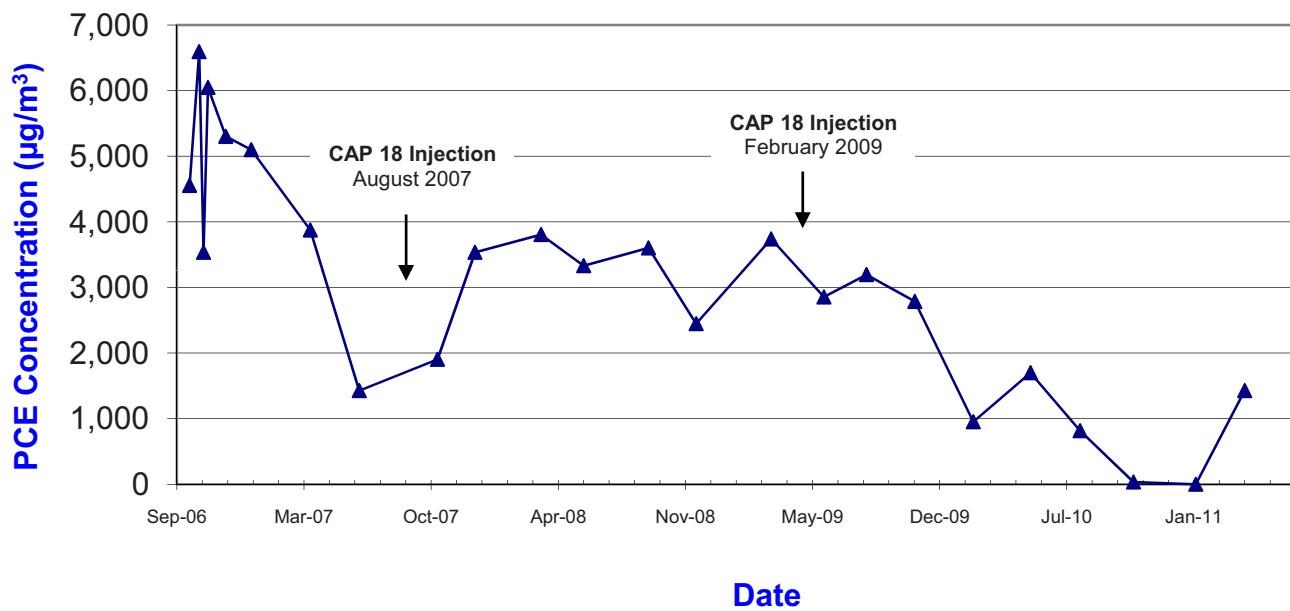
**PCE Vapor Concentrations Trend -  
Handicap Space Vapor Mitigation System (B2)**



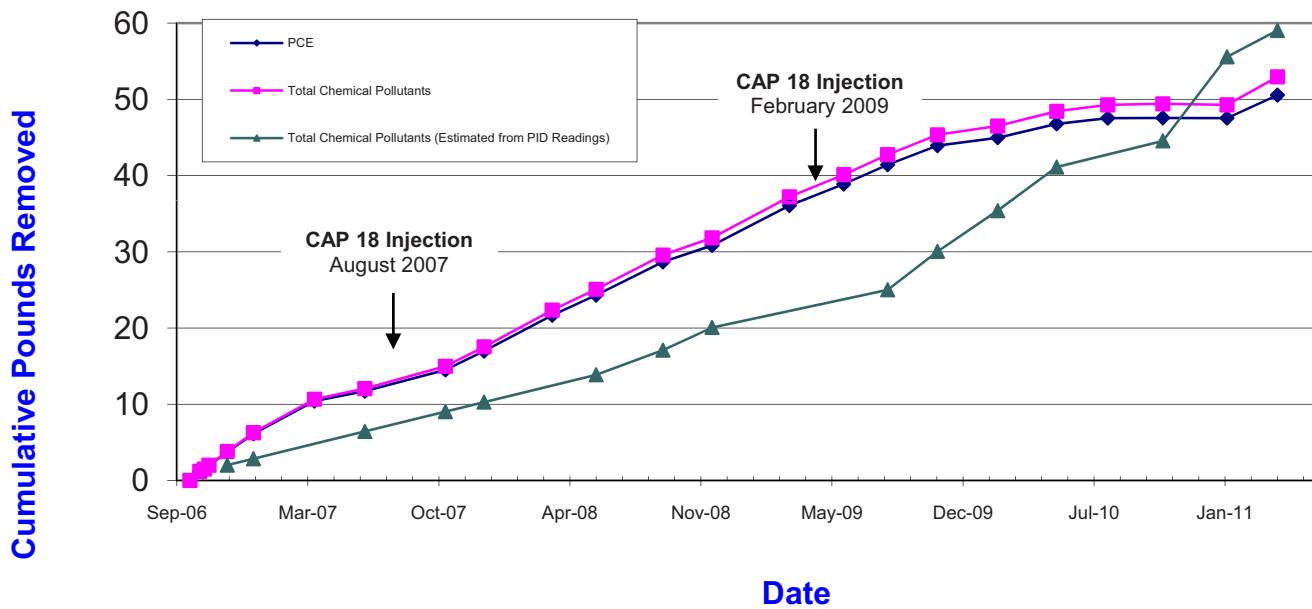
**Chemical Pounds Removed -  
Handicap Space Vapor Mitigation System (B2)**



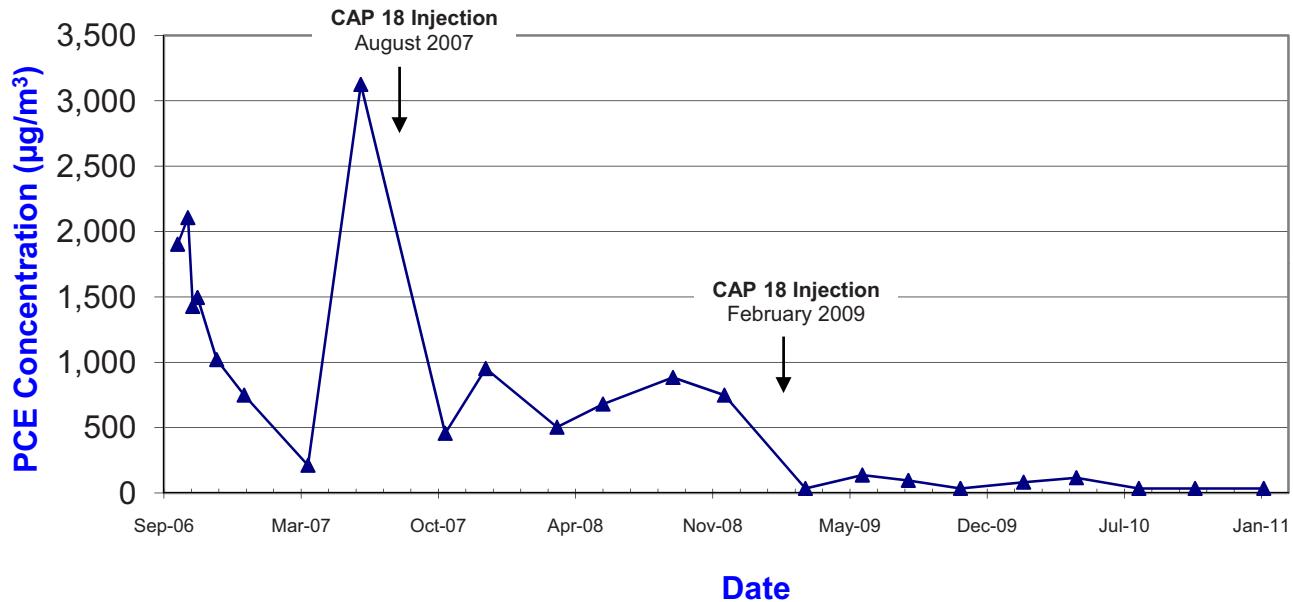
**PCE Vapor Concentrations Trend -  
Mexican Store Vapor Mitigation System (B3)**



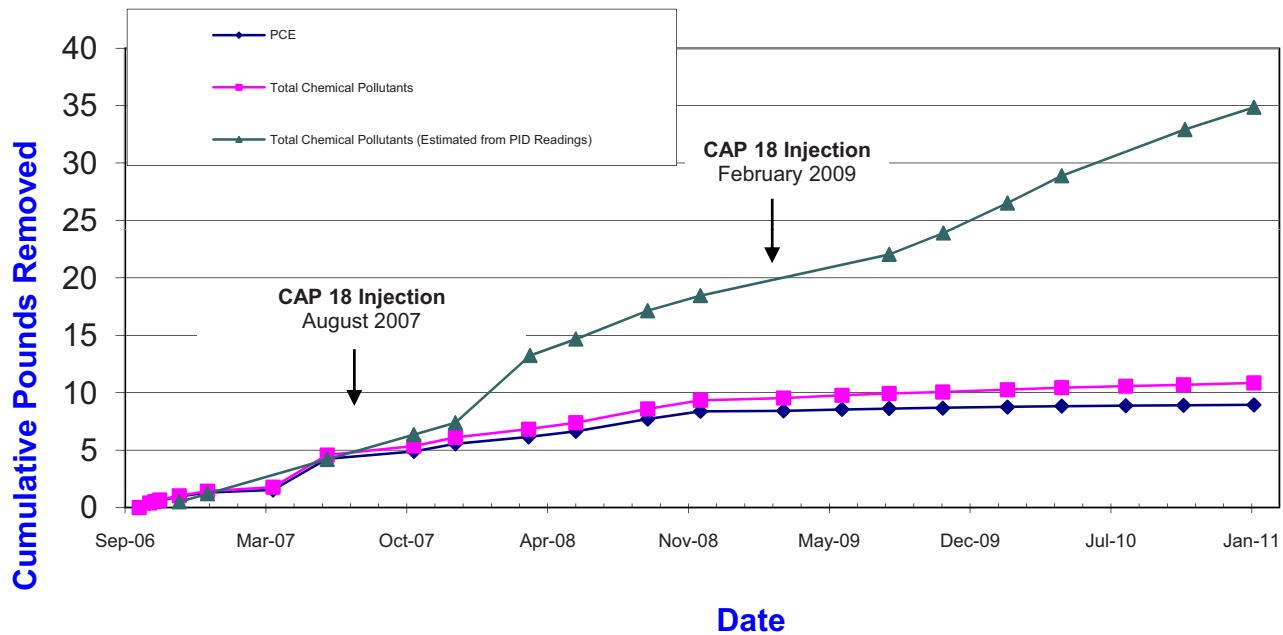
**Chemical Pounds Removed -  
Mexican Store Vapor Mitigation System (B3)**



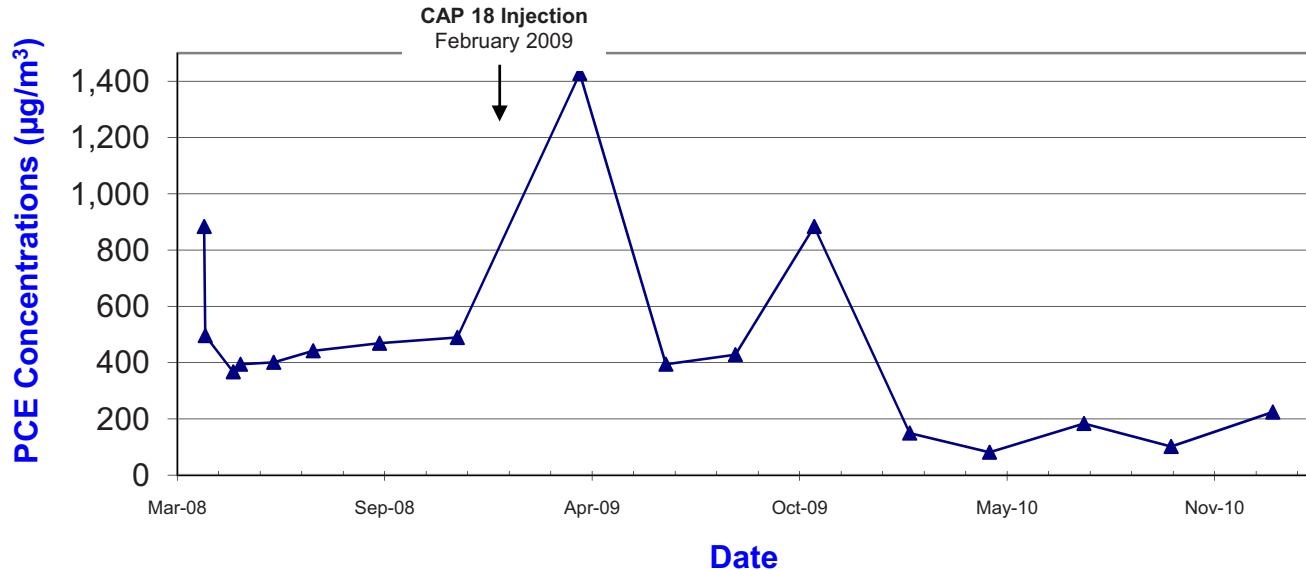
**PCE Vapor Concentrations Trend -  
Laundromat Vapor Mitigation System (B4)**



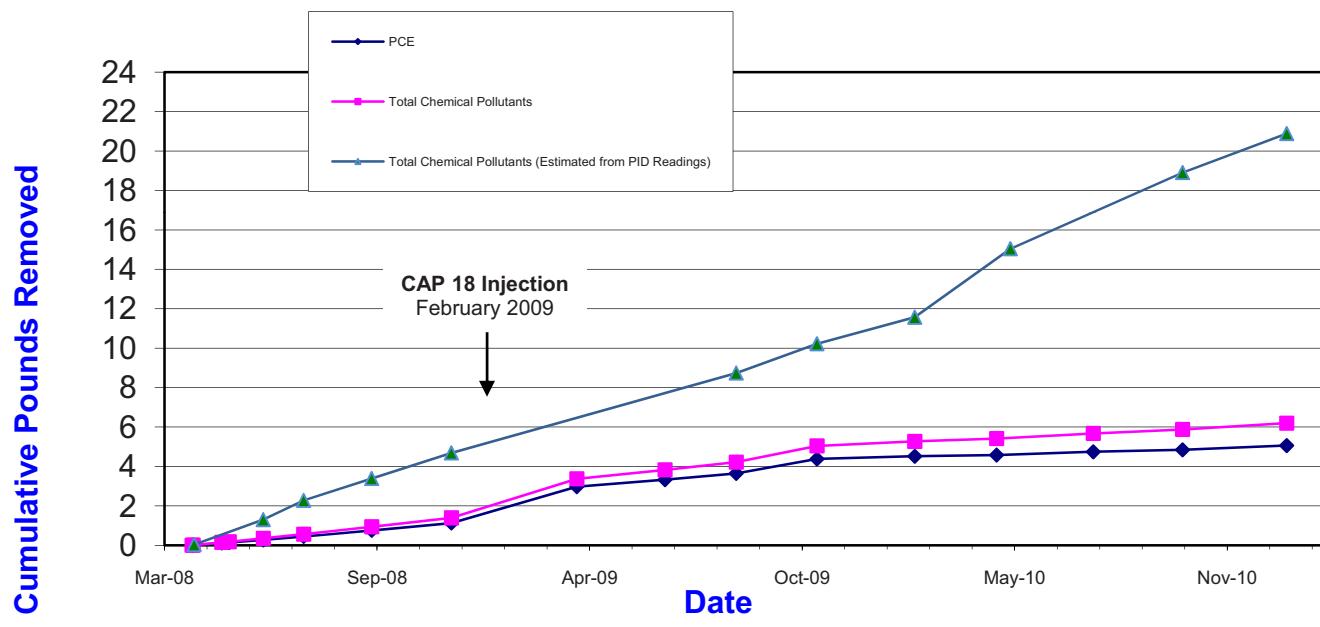
**Chemical Pounds Removed -  
Laundromat Vapor Mitigation System (B4)**



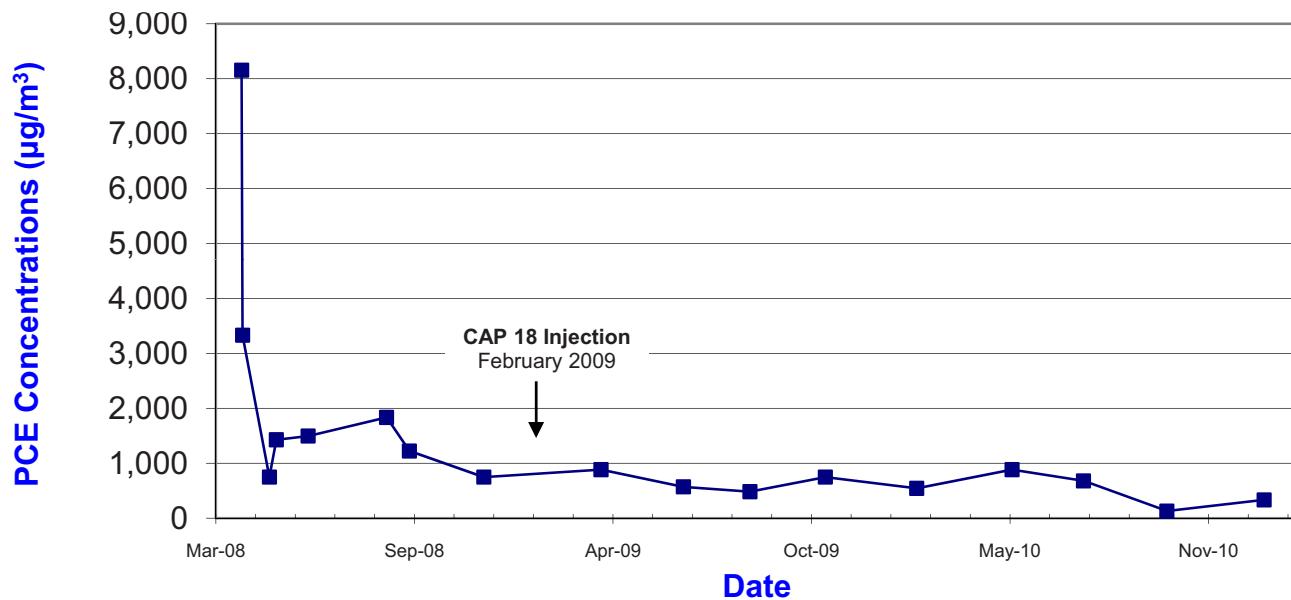
**PCE Vapor Concentrations Trend -  
Apartment Building 1 Vapor Mitigation System (B5)**



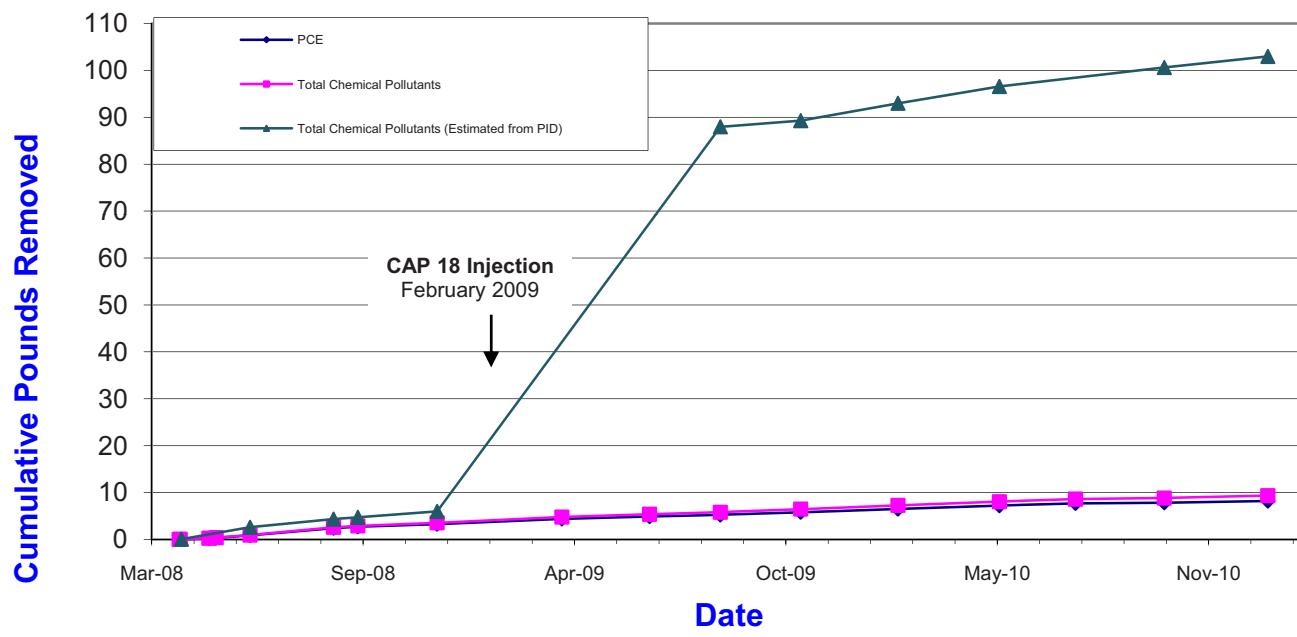
**Chemical Pounds Removed -  
Apartment Building 1 Vapor Mitigation System (B5)**



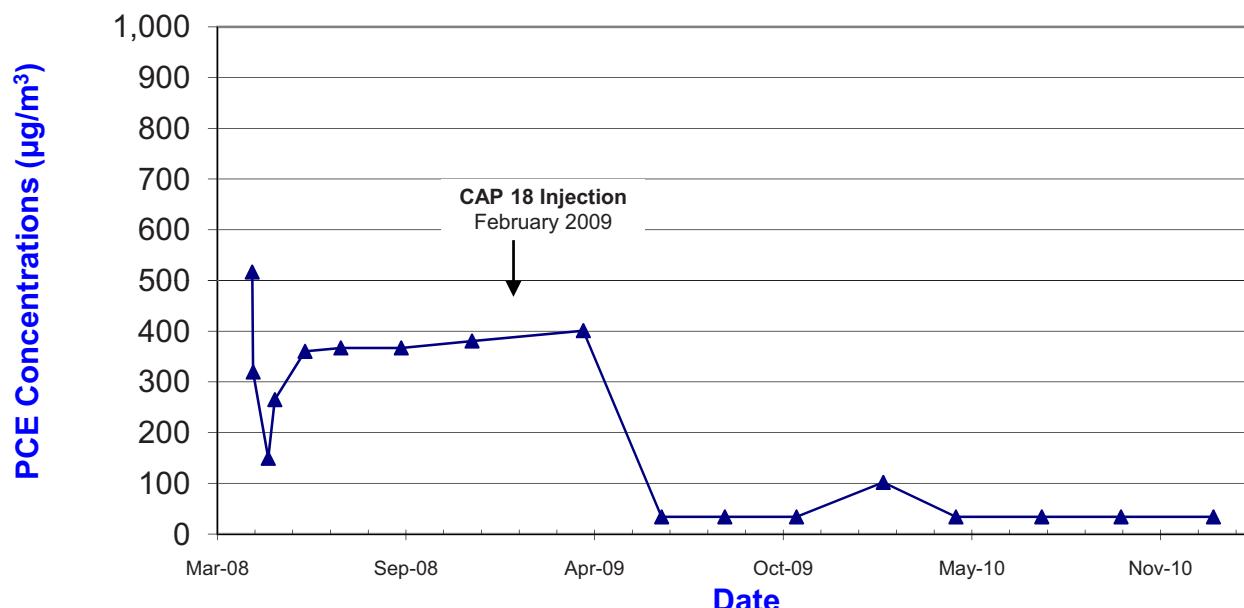
**PCE Vapor Concentrations Trend -  
Apartment Building 6 Vapor Mitigation System (B6)**



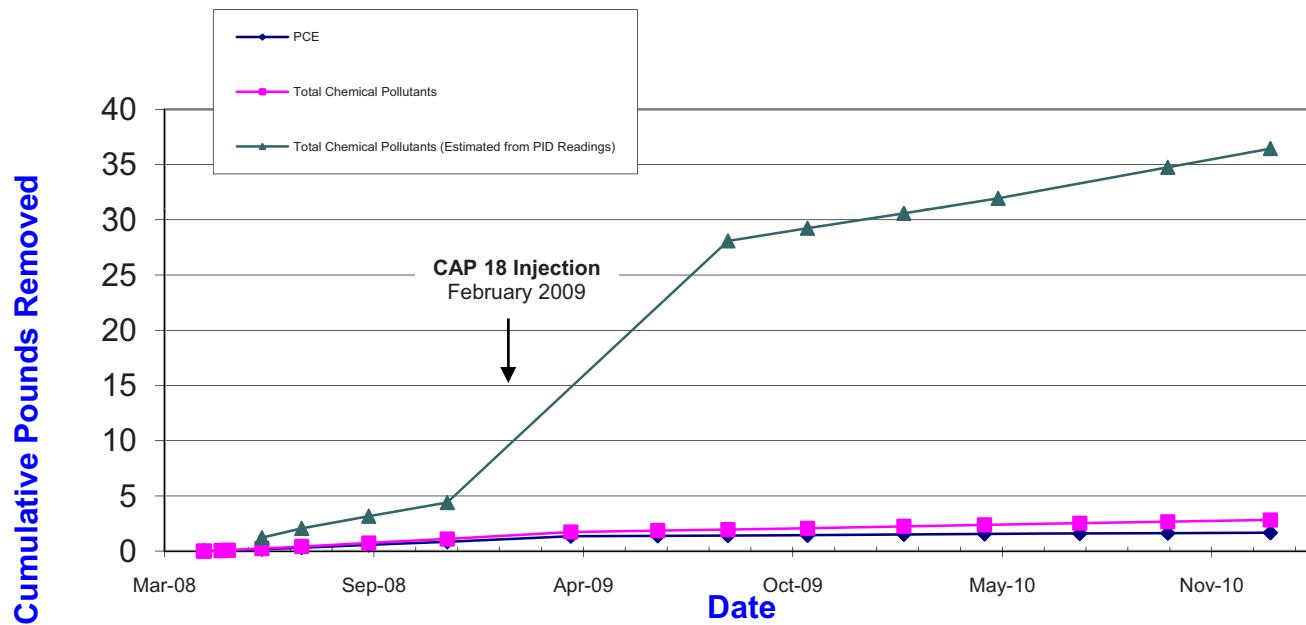
**Chemical Pounds Removed -  
Apartment Building 6 Vapor Mitigation System (B6)**



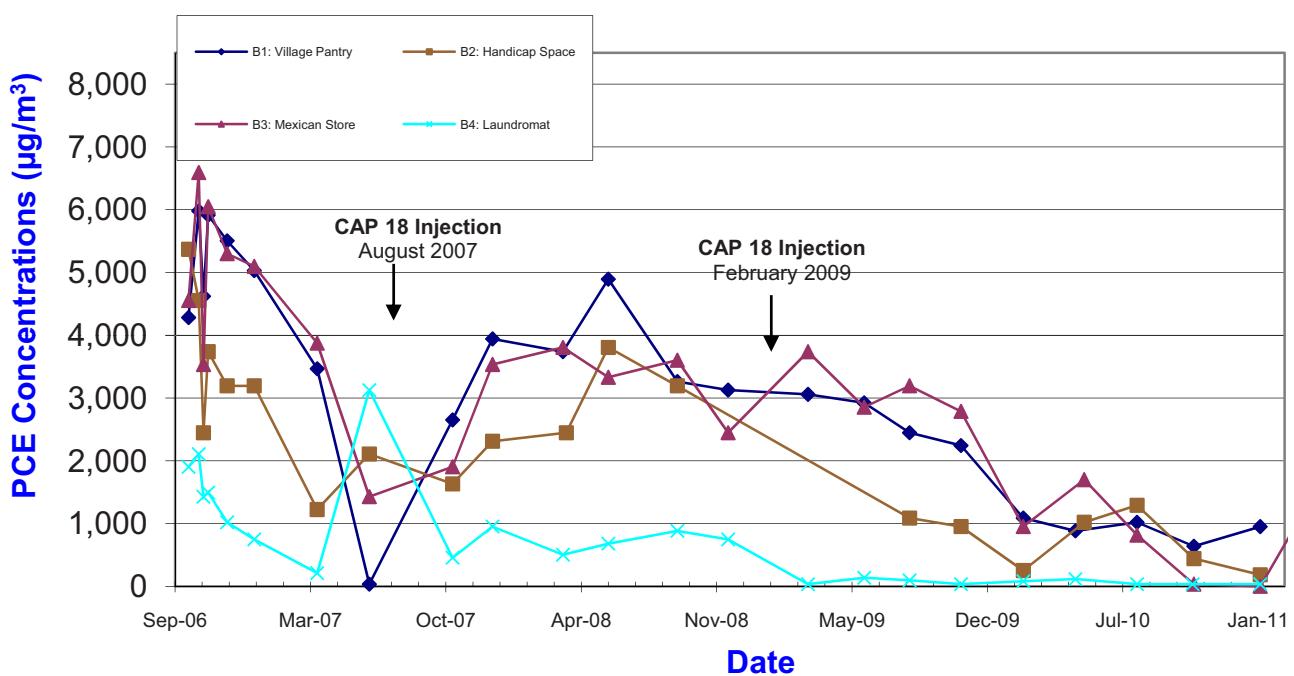
**PCE Vapor Concentrations Trend -  
Apartment Building 10 Vapor Mitigation System (B7)**



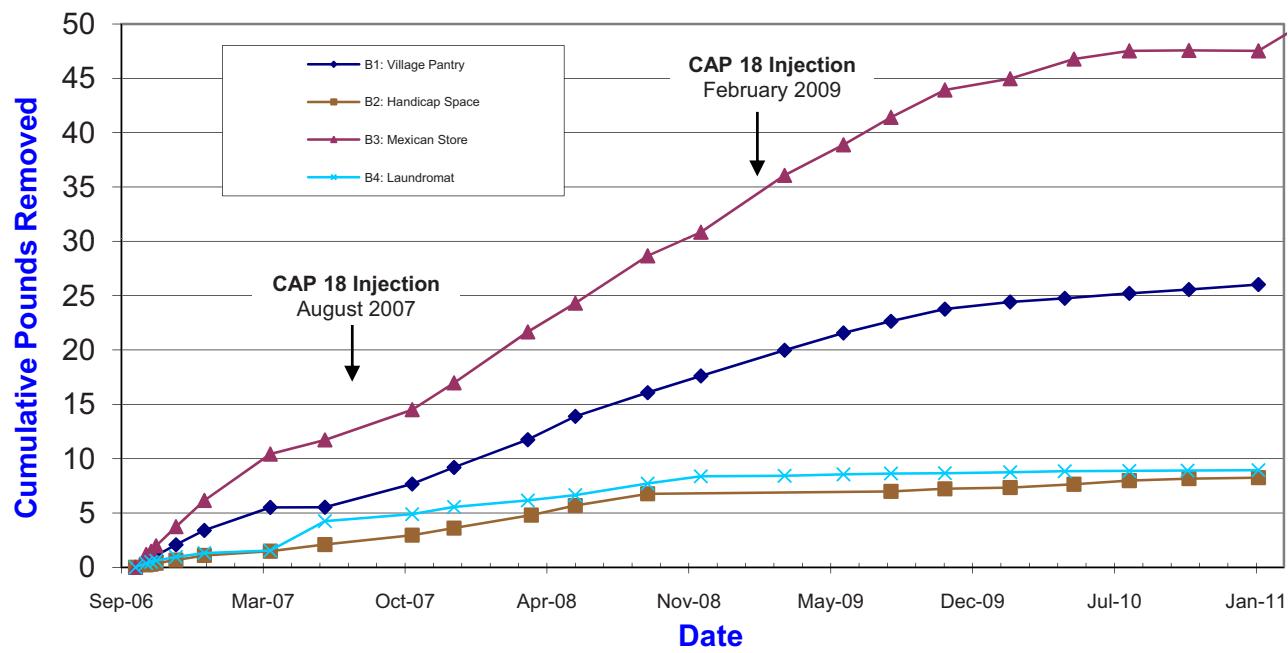
**Chemical Pounds Removed -  
Apartment Building 10 Vapor Mitigation System (B7)**



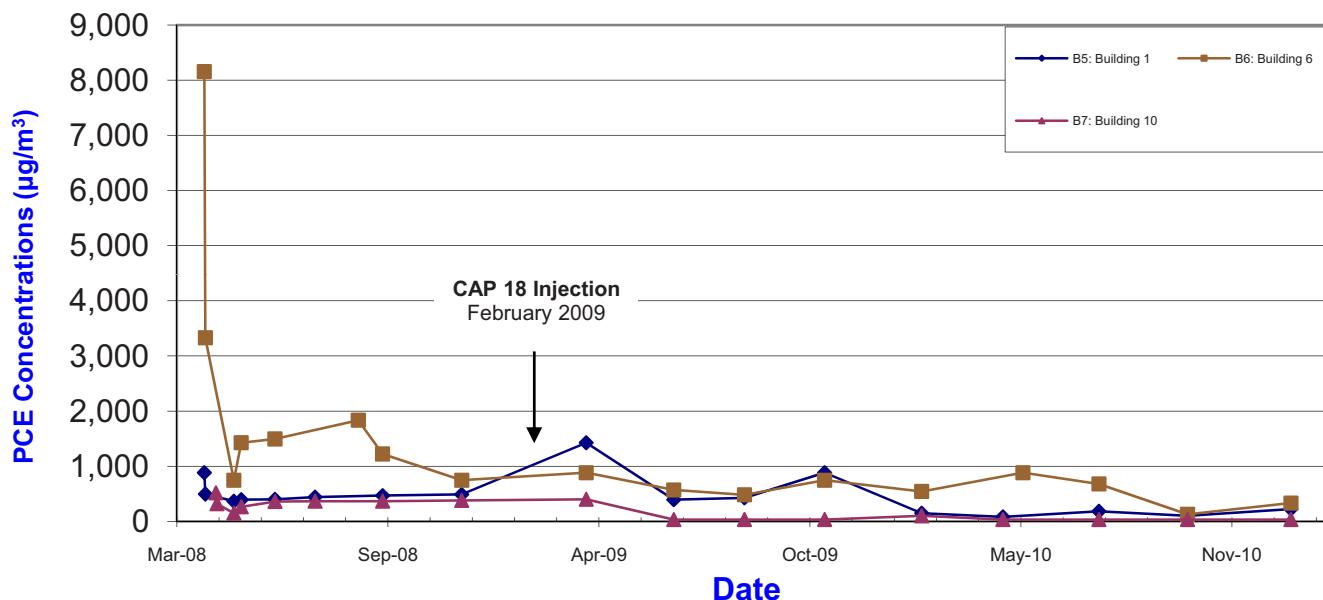
### PCE Concentrations Trend - Plaza Vapor Mitigation Systems (B1-B4)



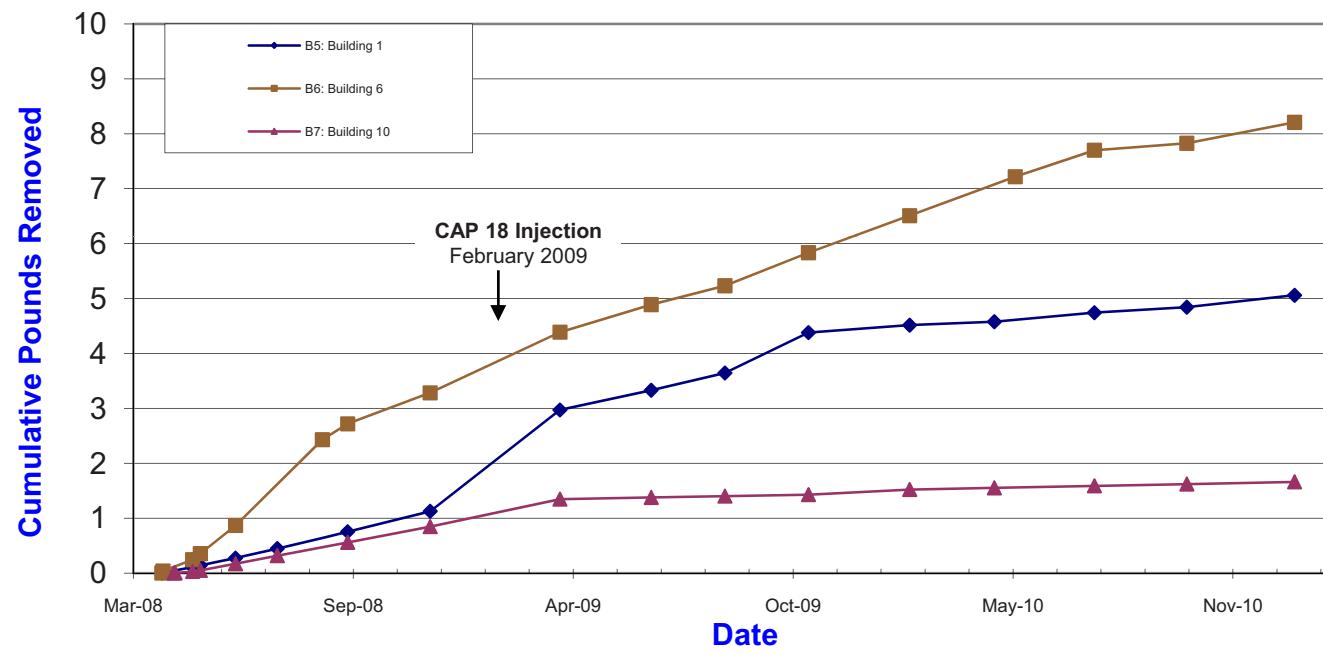
### PCE Pounds Removed - Plaza Vapor Mitigation Systems (B1-B4)



**PCE Concentrations Trend -  
Apartment Vapor Mitigation Systems (B5-B7)**



**PCE Pounds Removed -  
Apartment Vapor Mitigation Systems (B5-B7)**



## **APPENDIX A**

### **Lab Analytical Results**

February 03, 2011

Ms. Sarah Webb  
Mundell & Associates  
110 South Downey Ave.  
Indianapolis, IN 46219

RE: Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Dear Ms. Webb:

Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tina Sayer

tina.sayer@pacelabs.com  
Project Manager

Illinois/NELAC Certification #: 100418

Indiana Certification #: C-49-06

Kansas Certification #: E-10247

Kentucky Certification #: 0042

Louisiana Certification #: 04076

Ohio VAP: CL0065

Pennsylvania: 68-00791

West Virginia Certification #: 330

Enclosures

cc: Jelling Lai, Mundell & Associates

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Michigan Plaza M01046  
 Pace Project No.: 5045232

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5045232001	MMW-1S	Water	01/19/11 10:51	01/20/11 10:55
5045232002	MMW-8S	Water	01/19/11 09:46	01/20/11 10:55
5045232003	MMW-9S	Water	01/19/11 13:08	01/20/11 10:55
5045232004	MMW-10S	Water	01/19/11 10:28	01/20/11 10:55
5045232005	MMW-11S	Water	01/19/11 09:17	01/20/11 10:55
5045232006	MMW-11D	Water	01/19/11 09:00	01/20/11 10:55
5045232007	MMW-12S	Water	01/18/11 10:09	01/20/11 10:55
5045232008	MMW-13D	Water	01/19/11 10:03	01/20/11 10:55
5045232009	MMW-14D	Water	01/18/11 09:42	01/20/11 10:55
5045232010	MMW-P-02	Water	01/19/11 12:19	01/20/11 10:55
5045232011	MMW-P-03S	Water	01/19/11 11:25	01/20/11 10:55
5045232012	MMW-P-03D	Water	01/19/11 11:54	01/20/11 10:55
5045232013	MMW-P-09S	Water	01/19/11 13:46	01/20/11 10:55
5045232014	MMW-P-09D	Water	01/19/11 14:23	01/20/11 10:55
5045232015	MMW-C-01	Water	01/19/11 15:23	01/20/11 10:55
5045232016	MMW-C-02	Water	01/19/11 14:56	01/20/11 10:55
5045232017	Dup 1	Water	01/19/11 08:00	01/20/11 10:55

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5045232001	MMW-1S	EPA 8260	ALA	20
		EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1
5045232002	MMW-8S	EPA 8260	ALA	20
5045232003	MMW-9S	SM 2340B	FRW	1
		EPA 8260	ALA	20
		EPA 353.2	ILP	1
5045232004	MMW-10S	ASTM D516-90,02	JTP	1
		EPA 8260	ALA	20
		EPA 8260	ALA	20
5045232005	MMW-11S	EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1
		EPA 8260	ALA	20
5045232006	MMW-11D	EPA 8260	ALA	20
5045232007	MMW-12S	EPA 8260	ALA	20
5045232008	MMW-13D	EPA 8260	ALA	20
5045232009	MMW-14D	EPA 8260	ALA	20
5045232010	MMW-P-02	EPA 8260	ALA	20
5045232011	MMW-P-03S	EPA 8260	ALA	20
		EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1
5045232012	MMW-P-03D	EPA 8260	ALA	20
		EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1
5045232013	MMW-P-09S	EPA 8260	ALA	20
		EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1
5045232014	MMW-P-09D	EPA 8260	ALA	20
5045232015	MMW-C-01	EPA 8260	ALA	20
5045232016	MMW-C-02	EPA 8260	ALA	20
		EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1
5045232017	Dup 1	SM 2340B	FRW	1
		EPA 8260	ALA	20
		EPA 353.2	ILP	1
		ASTM D516-90,02	JTP	1

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-1S	Lab ID: 5045232001	Collected: 01/19/11 10:51	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/24/11 16:11	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/24/11 16:11	56-23-5	
Chloroform	ND ug/L		5.0	1		01/24/11 16:11	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/24/11 16:11	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/24/11 16:11	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/24/11 16:11	75-35-4	
cis-1,2-Dichloroethene	<b>35.4</b> ug/L		5.0	1		01/24/11 16:11	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/24/11 16:11	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/24/11 16:11	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/24/11 16:11	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/24/11 16:11	91-20-3	
Tetrachloroethene	<b>217</b> ug/L		5.0	1		01/24/11 16:11	127-18-4	
Toluene	ND ug/L		5.0	1		01/24/11 16:11	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/24/11 16:11	71-55-6	
Trichloroethene	<b>46.2</b> ug/L		5.0	1		01/24/11 16:11	79-01-6	
Vinyl chloride	<b>21.8</b> ug/L		2.0	1		01/24/11 16:11	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/24/11 16:11	1330-20-7	
Dibromofluoromethane (S)	97 %		80-123	1		01/24/11 16:11	1868-53-7	
4-Bromofluorobenzene (S)	94 %		70-126	1		01/24/11 16:11	460-00-4	
Toluene-d8 (S)	97 %		80-116	1		01/24/11 16:11	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND mg/L		0.10	1		01/20/11 14:03		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>76.4</b> mg/L		25.0	1		01/25/11 13:35	14808-79-8	

Date: 02/03/2011 02:24 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-8S	Lab ID: 5045232002	Collected: 01/19/11 09:46	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/24/11 16:44	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/24/11 16:44	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/24/11 16:44	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/24/11 16:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/24/11 16:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/24/11 16:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		01/24/11 16:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/24/11 16:44	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/24/11 16:44	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/24/11 16:44	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/24/11 16:44	91-20-3	
Tetrachloroethene	14.1	ug/L	5.0	1		01/24/11 16:44	127-18-4	
Toluene	ND	ug/L	5.0	1		01/24/11 16:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/24/11 16:44	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/24/11 16:44	79-01-6	
Vinyl chloride	172	ug/L	2.0	1		01/24/11 16:44	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/24/11 16:44	1330-20-7	
Dibromofluoromethane (S)	97 %		80-123	1		01/24/11 16:44	1868-53-7	
4-Bromofluorobenzene (S)	95 %		70-126	1		01/24/11 16:44	460-00-4	
Toluene-d8 (S)	98 %		80-116	1		01/24/11 16:44	2037-26-5	

Date: 02/03/2011 02:24 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-9S	Lab ID: 5045232003	Collected: 01/19/11 13:08	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>2340B Hardness, Total (Calc.)</b>	Analytical Method: SM 2340B							
Total Hardness	<b>614</b>	mg/L		1		02/03/11 10:15		
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	50.0	10		01/24/11 17:17	71-43-2	1d
Carbon tetrachloride	ND	ug/L	50.0	10		01/24/11 17:17	56-23-5	
Chloroform	ND	ug/L	50.0	10		01/24/11 17:17	67-66-3	
1,1-Dichloroethane	ND	ug/L	50.0	10		01/24/11 17:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	10		01/24/11 17:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	10		01/24/11 17:17	75-35-4	
cis-1,2-Dichloroethene	<b>1580</b>	ug/L	50.0	10		01/24/11 17:17	156-59-2	
trans-1,2-Dichloroethene	<b>136</b>	ug/L	50.0	10		01/24/11 17:17	156-60-5	
Ethylbenzene	ND	ug/L	50.0	10		01/24/11 17:17	100-41-4	
Methylene chloride	ND	ug/L	50.0	10		01/24/11 17:17	75-09-2	
Naphthalene	ND	ug/L	50.0	10		01/24/11 17:17	91-20-3	
Tetrachloroethene	ND	ug/L	50.0	10		01/24/11 17:17	127-18-4	2d
Toluene	ND	ug/L	50.0	10		01/24/11 17:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	50.0	10		01/24/11 17:17	71-55-6	
Trichloroethene	ND	ug/L	50.0	10		01/24/11 17:17	79-01-6	3d
Vinyl chloride	<b>1490</b>	ug/L	20.0	10		01/24/11 17:17	75-01-4	
Xylene (Total)	ND	ug/L	100	10		01/24/11 17:17	1330-20-7	
Dibromofluoromethane (S)	97 %		80-123	10		01/24/11 17:17	1868-53-7	D4
4-Bromofluorobenzene (S)	96 %		70-126	10		01/24/11 17:17	460-00-4	
Toluene-d8 (S)	99 %		80-116	10		01/24/11 17:17	2037-26-5	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	<b>0.22</b>	mg/L	0.10	1		01/20/11 14:06		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>83.2</b>	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-10S	Lab ID: 5045232004	Collected: 01/19/11 10:28	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/24/11 19:27	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/24/11 19:27	56-23-5	
Chloroform	ND ug/L		5.0	1		01/24/11 19:27	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/24/11 19:27	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/24/11 19:27	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/24/11 19:27	75-35-4	
cis-1,2-Dichloroethene	<b>80.9</b> ug/L		5.0	1		01/24/11 19:27	156-59-2	
trans-1,2-Dichloroethene	<b>12.7</b> ug/L		5.0	1		01/24/11 19:27	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/24/11 19:27	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/24/11 19:27	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/24/11 19:27	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/24/11 19:27	127-18-4	
Toluene	ND ug/L		5.0	1		01/24/11 19:27	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/24/11 19:27	71-55-6	
Trichloroethene	<b>14.4</b> ug/L		5.0	1		01/24/11 19:27	79-01-6	
Vinyl chloride	<b>88.0</b> ug/L		2.0	1		01/24/11 19:27	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/24/11 19:27	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/24/11 19:27	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/24/11 19:27	460-00-4	
Toluene-d8 (S)	98 %		80-116	1		01/24/11 19:27	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-11S	Lab ID: 5045232005	Collected: 01/19/11 09:17	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/24/11 20:00	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/24/11 20:00	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/24/11 20:00	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/24/11 20:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/24/11 20:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/24/11 20:00	75-35-4	
cis-1,2-Dichloroethene	46.3	ug/L	5.0	1		01/24/11 20:00	156-59-2	
trans-1,2-Dichloroethene	12.9	ug/L	5.0	1		01/24/11 20:00	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/24/11 20:00	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/24/11 20:00	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/24/11 20:00	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/24/11 20:00	127-18-4	
Toluene	ND	ug/L	5.0	1		01/24/11 20:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/24/11 20:00	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/24/11 20:00	79-01-6	
Vinyl chloride	ND	ug/L	2.0	1		01/24/11 20:00	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/24/11 20:00	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/24/11 20:00	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/24/11 20:00	460-00-4	
Toluene-d8 (S)	98 %		80-116	1		01/24/11 20:00	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	5.1	mg/L	0.10	1		01/20/11 14:02		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	173	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-11D	Lab ID: 5045232006	Collected: 01/19/11 09:00	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/24/11 20:32	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/24/11 20:32	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/24/11 20:32	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/24/11 20:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/24/11 20:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/24/11 20:32	75-35-4	
cis-1,2-Dichloroethene	<b>570</b>	ug/L	50.0	10		01/25/11 14:05	156-59-2	
trans-1,2-Dichloroethene	<b>26.7</b>	ug/L	5.0	1		01/24/11 20:32	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/24/11 20:32	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/24/11 20:32	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/24/11 20:32	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/24/11 20:32	127-18-4	
Toluene	ND	ug/L	5.0	1		01/24/11 20:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/24/11 20:32	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/24/11 20:32	79-01-6	
Vinyl chloride	<b>5.9</b>	ug/L	2.0	1		01/24/11 20:32	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/24/11 20:32	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/24/11 20:32	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/24/11 20:32	460-00-4	
Toluene-d8 (S)	98 %		80-116	1		01/24/11 20:32	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-12S	Lab ID: 5045232007	Collected: 01/18/11 10:09	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/24/11 21:05	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/24/11 21:05	56-23-5	
Chloroform	ND ug/L		5.0	1		01/24/11 21:05	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/24/11 21:05	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/24/11 21:05	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/24/11 21:05	75-35-4	
cis-1,2-Dichloroethene	19.7 ug/L		5.0	1		01/24/11 21:05	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/24/11 21:05	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/24/11 21:05	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/24/11 21:05	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/24/11 21:05	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/24/11 21:05	127-18-4	
Toluene	ND ug/L		5.0	1		01/24/11 21:05	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/24/11 21:05	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/24/11 21:05	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		01/24/11 21:05	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/24/11 21:05	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/24/11 21:05	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/24/11 21:05	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/24/11 21:05	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-13D	Lab ID: 5045232008	Collected: 01/19/11 10:03	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/24/11 21:38	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/24/11 21:38	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/24/11 21:38	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/24/11 21:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/24/11 21:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/24/11 21:38	75-35-4	
cis-1,2-Dichloroethene	920	ug/L	50.0	10		01/24/11 22:10	156-59-2	
trans-1,2-Dichloroethene	12.3	ug/L	5.0	1		01/24/11 21:38	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/24/11 21:38	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/24/11 21:38	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/24/11 21:38	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/24/11 21:38	127-18-4	
Toluene	ND	ug/L	5.0	1		01/24/11 21:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/24/11 21:38	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/24/11 21:38	79-01-6	
Vinyl chloride	179	ug/L	2.0	1		01/24/11 21:38	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/24/11 21:38	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/24/11 21:38	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/24/11 21:38	460-00-4	
Toluene-d8 (S)	98 %		80-116	1		01/24/11 21:38	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-14D	Lab ID: 5045232009	Collected: 01/18/11 09:42	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/25/11 13:16	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/25/11 13:16	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/25/11 13:16	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/25/11 13:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/25/11 13:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/25/11 13:16	75-35-4	
cis-1,2-Dichloroethene	785	ug/L	50.0	10		01/25/11 13:49	156-59-2	
trans-1,2-Dichloroethene	24.0	ug/L	5.0	1		01/25/11 13:16	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/25/11 13:16	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/25/11 13:16	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/25/11 13:16	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/25/11 13:16	127-18-4	
Toluene	ND	ug/L	5.0	1		01/25/11 13:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/25/11 13:16	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/25/11 13:16	79-01-6	
Vinyl chloride	109	ug/L	2.0	1		01/25/11 13:16	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/25/11 13:16	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/25/11 13:16	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		01/25/11 13:16	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/25/11 13:16	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-P-02	Lab ID: 5045232010	Collected: 01/19/11 12:19	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/25/11 14:22	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/25/11 14:22	56-23-5	
Chloroform	ND ug/L		5.0	1		01/25/11 14:22	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/25/11 14:22	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/25/11 14:22	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/25/11 14:22	75-35-4	
cis-1,2-Dichloroethene	64.3 ug/L		5.0	1		01/25/11 14:22	156-59-2	
trans-1,2-Dichloroethene	14.0 ug/L		5.0	1		01/25/11 14:22	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/25/11 14:22	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/25/11 14:22	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/25/11 14:22	91-20-3	
Tetrachloroethene	15.9 ug/L		5.0	1		01/25/11 14:22	127-18-4	
Toluene	ND ug/L		5.0	1		01/25/11 14:22	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/25/11 14:22	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/25/11 14:22	79-01-6	
Vinyl chloride	396 ug/L		20.0	10		01/25/11 21:26	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/25/11 14:22	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/25/11 14:22	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/25/11 14:22	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/25/11 14:22	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-P-03S	Lab ID: 5045232011	Collected: 01/19/11 11:25	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/25/11 16:00	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/25/11 16:00	56-23-5	
Chloroform	ND ug/L		5.0	1		01/25/11 16:00	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/25/11 16:00	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/25/11 16:00	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/25/11 16:00	75-35-4	
cis-1,2-Dichloroethene	79.7 ug/L		5.0	1		01/25/11 16:00	156-59-2	
trans-1,2-Dichloroethene	19.4 ug/L		5.0	1		01/25/11 16:00	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/25/11 16:00	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/25/11 16:00	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/25/11 16:00	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/25/11 16:00	127-18-4	
Toluene	ND ug/L		5.0	1		01/25/11 16:00	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/25/11 16:00	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/25/11 16:00	79-01-6	
Vinyl chloride	338 ug/L		20.0	10		01/25/11 16:33	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/25/11 16:00	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/25/11 16:00	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		01/25/11 16:00	460-00-4	
Toluene-d8 (S)	100 %		80-116	1		01/25/11 16:00	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND mg/L		0.10	1		01/20/11 14:04		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	64.1 mg/L		25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-P-03D	Lab ID: 5045232012	Collected: 01/19/11 11:54	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/25/11 17:05	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/25/11 17:05	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/25/11 17:05	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/25/11 17:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/25/11 17:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/25/11 17:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		01/25/11 17:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/25/11 17:05	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/25/11 17:05	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/25/11 17:05	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/25/11 17:05	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/25/11 17:05	127-18-4	
Toluene	ND	ug/L	5.0	1		01/25/11 17:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/25/11 17:05	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/25/11 17:05	79-01-6	
Vinyl chloride	46.2	ug/L	2.0	1		01/25/11 17:05	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/25/11 17:05	1330-20-7	
Dibromofluoromethane (S)	101	%	80-123	1		01/25/11 17:05	1868-53-7	
4-Bromofluorobenzene (S)	96	%	70-126	1		01/25/11 17:05	460-00-4	
Toluene-d8 (S)	99	%	80-116	1		01/25/11 17:05	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		01/20/11 14:05		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	25.8	mg/L	5.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-P-09S	Lab ID: 5045232013	Collected: 01/19/11 13:46	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/25/11 17:38	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/25/11 17:38	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/25/11 17:38	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/25/11 17:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/25/11 17:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/25/11 17:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		01/25/11 17:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/25/11 17:38	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/25/11 17:38	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/25/11 17:38	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/25/11 17:38	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/25/11 17:38	127-18-4	
Toluene	ND	ug/L	5.0	1		01/25/11 17:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/25/11 17:38	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/25/11 17:38	79-01-6	
Vinyl chloride	ND	ug/L	2.0	1		01/25/11 17:38	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/25/11 17:38	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/25/11 17:38	1868-53-7	
4-Bromofluorobenzene (S)	95 %		70-126	1		01/25/11 17:38	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/25/11 17:38	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	<b>0.10</b>	mg/L	0.10	1		01/20/11 14:13		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>106</b>	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-P-09D	Lab ID: 5045232014	Collected: 01/19/11 14:23	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/25/11 18:11	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/25/11 18:11	56-23-5	
Chloroform	ND ug/L		5.0	1		01/25/11 18:11	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/25/11 18:11	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/25/11 18:11	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/25/11 18:11	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		01/25/11 18:11	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/25/11 18:11	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/25/11 18:11	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/25/11 18:11	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/25/11 18:11	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/25/11 18:11	127-18-4	
Toluene	ND ug/L		5.0	1		01/25/11 18:11	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/25/11 18:11	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/25/11 18:11	79-01-6	
Vinyl chloride	66.9 ug/L		2.0	1		01/25/11 18:11	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/25/11 18:11	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/25/11 18:11	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/25/11 18:11	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/25/11 18:11	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-C-01	Lab ID: 5045232015	Collected: 01/19/11 15:23	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/25/11 18:43	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/25/11 18:43	56-23-5	
Chloroform	ND ug/L		5.0	1		01/25/11 18:43	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/25/11 18:43	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/25/11 18:43	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/25/11 18:43	75-35-4	
cis-1,2-Dichloroethene	14.7 ug/L		5.0	1		01/25/11 18:43	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/25/11 18:43	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/25/11 18:43	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/25/11 18:43	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/25/11 18:43	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/25/11 18:43	127-18-4	
Toluene	ND ug/L		5.0	1		01/25/11 18:43	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/25/11 18:43	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/25/11 18:43	79-01-6	
Vinyl chloride	215 ug/L		20.0	10		01/25/11 19:16	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/25/11 18:43	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/25/11 18:43	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		01/25/11 18:43	460-00-4	
Toluene-d8 (S)	102 %		80-116	1		01/25/11 18:43	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: MMW-C-02	Lab ID: 5045232016	Collected: 01/19/11 14:56	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/25/11 19:48	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/25/11 19:48	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/25/11 19:48	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/25/11 19:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/25/11 19:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/25/11 19:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	1		01/25/11 19:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/25/11 19:48	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/25/11 19:48	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/25/11 19:48	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/25/11 19:48	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/25/11 19:48	127-18-4	
Toluene	ND	ug/L	5.0	1		01/25/11 19:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/25/11 19:48	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/25/11 19:48	79-01-6	
Vinyl chloride	ND	ug/L	2.0	1		01/25/11 19:48	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/25/11 19:48	1330-20-7	
Dibromofluoromethane (S)	96 %		80-123	1		01/25/11 19:48	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/25/11 19:48	460-00-4	
Toluene-d8 (S)	101 %		80-116	1		01/25/11 19:48	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	<b>0.14</b>	mg/L	0.10	1		01/20/11 14:14		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>76.8</b>	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Sample: Dup 1	Lab ID: 5045232017	Collected: 01/19/11 08:00	Received: 01/20/11 10:55	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>2340B Hardness, Total (Calc.)</b>	Analytical Method: SM 2340B							
Total Hardness	<b>346</b>	mg/L		1		02/03/11 10:18		
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/26/11 13:30	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/26/11 13:30	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/26/11 13:30	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/26/11 13:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/26/11 13:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/26/11 13:30	75-35-4	
cis-1,2-Dichloroethene	<b>85.4</b>	ug/L	5.0	1		01/26/11 13:30	156-59-2	
trans-1,2-Dichloroethene	<b>15.0</b>	ug/L	5.0	1		01/26/11 13:30	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/26/11 13:30	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/26/11 13:30	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/26/11 13:30	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/26/11 13:30	127-18-4	
Toluene	ND	ug/L	5.0	1		01/26/11 13:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/26/11 13:30	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/26/11 13:30	79-01-6	
Vinyl chloride	<b>384</b>	ug/L	20.0	10		01/25/11 20:21	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/26/11 13:30	1330-20-7	
Dibromofluoromethane (S)	100 %		80-123	1		01/26/11 13:30	1868-53-7	
4-Bromofluorobenzene (S)	95 %		70-126	1		01/26/11 13:30	460-00-4	
Toluene-d8 (S)	100 %		80-116	1		01/26/11 13:30	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		01/20/11 14:01		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>65.0</b>	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
 Pace Project No.: 5045232

QC Batch: MSV/29817 Analysis Method: EPA 8260  
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
 Associated Lab Samples: 5045232001, 5045232002, 5045232003, 5045232004, 5045232005, 5045232006, 5045232007, 5045232008

METHOD BLANK: 531481 Matrix: Water

Associated Lab Samples: 5045232001, 5045232002, 5045232003, 5045232004, 5045232005, 5045232006, 5045232007, 5045232008

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
1,1,1-Trichloroethane	ug/L	ND	5.0	01/24/11 12:23	
1,1-Dichloroethane	ug/L	ND	5.0	01/24/11 12:23	
1,1-Dichloroethene	ug/L	ND	5.0	01/24/11 12:23	
1,2-Dichloroethane	ug/L	ND	5.0	01/24/11 12:23	
Benzene	ug/L	ND	5.0	01/24/11 12:23	
Carbon tetrachloride	ug/L	ND	5.0	01/24/11 12:23	
Chloroform	ug/L	ND	5.0	01/24/11 12:23	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/24/11 12:23	
Ethylbenzene	ug/L	ND	5.0	01/24/11 12:23	
Methylene chloride	ug/L	ND	5.0	01/24/11 12:23	
Naphthalene	ug/L	ND	5.0	01/24/11 12:23	
Tetrachloroethene	ug/L	ND	5.0	01/24/11 12:23	
Toluene	ug/L	ND	5.0	01/24/11 12:23	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/24/11 12:23	
Trichloroethene	ug/L	ND	5.0	01/24/11 12:23	
Vinyl chloride	ug/L	ND	2.0	01/24/11 12:23	
Xylene (Total)	ug/L	ND	10.0	01/24/11 12:23	
4-Bromofluorobenzene (S)	%	98	70-126	01/24/11 12:23	
Dibromofluoromethane (S)	%	100	80-123	01/24/11 12:23	
Toluene-d8 (S)	%	99	80-116	01/24/11 12:23	

LABORATORY CONTROL SAMPLE: 531482

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
1,1,1-Trichloroethane	ug/L	50	42.5	85	69-136	
1,1-Dichloroethane	ug/L	50	43.4	87	67-133	
1,1-Dichloroethene	ug/L	50	47.1	94	63-128	
1,2-Dichloroethane	ug/L	50	44.7	89	69-139	
Benzene	ug/L	50	44.2	88	78-127	
Carbon tetrachloride	ug/L	50	42.0	84	62-143	
Chloroform	ug/L	50	43.8	88	74-131	
cis-1,2-Dichloroethene	ug/L	50	45.4	91	74-128	
Ethylbenzene	ug/L	50	42.9	86	81-126	
Methylene chloride	ug/L	50	41.6	83	32-164	
Naphthalene	ug/L	50	46.2	92	61-135	
Tetrachloroethene	ug/L	50	41.7	83	60-119	
Toluene	ug/L	50	44.9	90	75-129	
trans-1,2-Dichloroethene	ug/L	50	43.7	87	71-126	
Trichloroethene	ug/L	50	44.9	90	74-130	
Vinyl chloride	ug/L	50	42.9	86	55-141	
Xylene (Total)	ug/L	150	123	82	76-132	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

LABORATORY CONTROL SAMPLE: 531482

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			102	70-126	
Dibromofluoromethane (S)	%			104	80-123	
Toluene-d8 (S)	%			97	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 531483 531484

Parameter	Units	5045232003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
1,1,1-Trichloroethane	ug/L	ND	500	500	491	520	98	104	64-143	6	20	
1,1-Dichloroethane	ug/L	ND	500	500	511	532	102	106	68-139	4	20	
1,1-Dichloroethene	ug/L	ND	500	500	560	582	112	116	55-140	4	20	
1,2-Dichloroethane	ug/L	ND	500	500	508	524	102	105	63-148	3	20	
Benzene	ug/L	ND	500	500	521	542	104	108	63-141	4	20	
Carbon tetrachloride	ug/L	ND	500	500	467	502	93	100	54-145	7	20	
Chloroform	ug/L	ND	500	500	505	527	101	105	67-134	4	20	
cis-1,2-Dichloroethene	ug/L	1580	500	500	2260	2340	136	151	65-132	3	20	M0
Ethylbenzene	ug/L	ND	500	500	512	537	102	107	44-151	5	20	
Methylene chloride	ug/L	ND	500	500	515	530	103	106	46-154	3	20	
Naphthalene	ug/L	ND	500	500	509	527	102	105	44-138	3	20	
Tetrachloroethene	ug/L	ND	500	500	487	510	97	102	25-146	5	20	
Toluene	ug/L	ND	500	500	523	551	105	110	59-142	5	20	
trans-1,2-Dichloroethene	ug/L	136	500	500	551	576	83	88	60-137	4	20	
Trichloroethene	ug/L	ND	500	500	522	544	104	109	61-137	4	20	
Vinyl chloride	ug/L	1490	500	500	2160	2210	133	144	51-144	3	20	
Xylene (Total)	ug/L	ND	1500	1500	1480	1560	99	104	44-152	5	20	
4-Bromofluorobenzene (S)	%						101	101	70-126		20	
Dibromofluoromethane (S)	%						100	101	80-123		20	
Toluene-d8 (S)	%						98	99	80-116		20	

## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

QC Batch: MSV/29835 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 5045232009, 5045232010, 5045232011, 5045232012, 5045232013, 5045232014, 5045232015, 5045232016

METHOD BLANK: 531710 Matrix: Water

Associated Lab Samples: 5045232009, 5045232010, 5045232011, 5045232012, 5045232013, 5045232014, 5045232015, 5045232016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/25/11 12:43	
1,1-Dichloroethane	ug/L	ND	5.0	01/25/11 12:43	
1,1-Dichloroethene	ug/L	ND	5.0	01/25/11 12:43	
1,2-Dichloroethane	ug/L	ND	5.0	01/25/11 12:43	
Benzene	ug/L	ND	5.0	01/25/11 12:43	
Carbon tetrachloride	ug/L	ND	5.0	01/25/11 12:43	
Chloroform	ug/L	ND	5.0	01/25/11 12:43	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/25/11 12:43	
Ethylbenzene	ug/L	ND	5.0	01/25/11 12:43	
Methylene chloride	ug/L	ND	5.0	01/25/11 12:43	
Naphthalene	ug/L	ND	5.0	01/25/11 12:43	
Tetrachloroethene	ug/L	ND	5.0	01/25/11 12:43	
Toluene	ug/L	ND	5.0	01/25/11 12:43	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/25/11 12:43	
Trichloroethene	ug/L	ND	5.0	01/25/11 12:43	
Vinyl chloride	ug/L	ND	2.0	01/25/11 12:43	
Xylene (Total)	ug/L	ND	10.0	01/25/11 12:43	
4-Bromofluorobenzene (S)	%	97	70-126	01/25/11 12:43	
Dibromofluoromethane (S)	%	98	80-123	01/25/11 12:43	
Toluene-d8 (S)	%	99	80-116	01/25/11 12:43	

LABORATORY CONTROL SAMPLE: 531711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	38.0	76	69-136	
1,1-Dichloroethane	ug/L	50	39.8	80	67-133	
1,1-Dichloroethene	ug/L	50	42.7	85	63-128	
1,2-Dichloroethane	ug/L	50	40.1	80	69-139	
Benzene	ug/L	50	40.8	82	78-127	
Carbon tetrachloride	ug/L	50	38.3	77	62-143	
Chloroform	ug/L	50	40.1	80	74-131	
cis-1,2-Dichloroethene	ug/L	50	41.3	83	74-128	
Ethylbenzene	ug/L	50	39.4	79	81-126 L0	
Methylene chloride	ug/L	50	38.8	78	32-164	
Naphthalene	ug/L	50	41.4	83	61-135	
Tetrachloroethene	ug/L	50	38.8	78	60-119	
Toluene	ug/L	50	42.0	84	75-129	
trans-1,2-Dichloroethene	ug/L	50	40.0	80	71-126	
Trichloroethene	ug/L	50	41.8	84	74-130	
Vinyl chloride	ug/L	50	37.6	75	55-141	
Xylene (Total)	ug/L	150	114	76	76-132	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

LABORATORY CONTROL SAMPLE: 531711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			102	70-126	
Dibromofluoromethane (S)	%			101	80-123	
Toluene-d8 (S)	%			99	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 531712      531713

Parameter	Units	5045232010		MS		MSD		MS		MSD		% Rec Limits	RPD	RPD	Max Qual
		Result	Spike Conc.	Spike Conc.	Result	MSD	Result	% Rec	MSD	% Rec	MSD				
1,1,1-Trichloroethane	ug/L	ND	50	50	40.7	45.2	81	90	64-143	11	20				
1,1-Dichloroethane	ug/L	ND	50	50	43.1	47.7	86	95	68-139	10	20				
1,1-Dichloroethene	ug/L	ND	50	50	47.5	51.9	95	104	55-140	9	20				
1,2-Dichloroethane	ug/L	ND	50	50	43.4	47.8	87	96	63-148	10	20				
Benzene	ug/L	ND	50	50	44.4	48.7	89	97	63-141	9	20				
Carbon tetrachloride	ug/L	ND	50	50	39.4	44.2	79	88	54-145	12	20				
Chloroform	ug/L	ND	50	50	43.6	47.8	87	96	67-134	9	20				
cis-1,2-Dichloroethene	ug/L	64.3	50	50	105	112	82	95	65-132	6	20				
Ethylbenzene	ug/L	ND	50	50	42.5	46.5	85	93	44-151	9	20				
Methylene chloride	ug/L	ND	50	50	43.0	47.5	86	95	46-154	10	20				
Naphthalene	ug/L	ND	50	50	43.0	47.7	86	95	44-138	10	20				
Tetrachloroethene	ug/L	15.9	50	50	47.0	50.4	62	69	25-146	7	20				
Toluene	ug/L	ND	50	50	45.3	48.8	91	98	59-142	7	20				
trans-1,2-Dichloroethene	ug/L	14.0	50	50	48.0	52.4	68	77	60-137	9	20				
Trichloroethene	ug/L	ND	50	50	45.3	49.0	91	98	61-137	8	20				
Vinyl chloride	ug/L	396	50	50	431	449	72	108	51-144	4	20				
Xylene (Total)	ug/L	ND	150	150	122	133	81	89	44-152	9	20				
4-Bromofluorobenzene (S)	%						101	101	70-126		20				
Dibromofluoromethane (S)	%						100	102	80-123		20				
Toluene-d8 (S)	%						99	97	80-116		20				

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

QC Batch:	MSV/29863	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	5045232017		

METHOD BLANK: 532172                                  Matrix: Water

Associated Lab Samples: 5045232017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/26/11 13:04	
1,1-Dichloroethane	ug/L	ND	5.0	01/26/11 13:04	
1,1-Dichloroethene	ug/L	ND	5.0	01/26/11 13:04	
1,2-Dichloroethane	ug/L	ND	5.0	01/26/11 13:04	
Benzene	ug/L	ND	5.0	01/26/11 13:04	
Carbon tetrachloride	ug/L	ND	5.0	01/26/11 13:04	
Chloroform	ug/L	ND	5.0	01/26/11 13:04	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/26/11 13:04	
Ethylbenzene	ug/L	ND	5.0	01/26/11 13:04	
Methylene chloride	ug/L	ND	5.0	01/26/11 13:04	
Naphthalene	ug/L	ND	5.0	01/26/11 13:04	
Tetrachloroethene	ug/L	ND	5.0	01/26/11 13:04	
Toluene	ug/L	ND	5.0	01/26/11 13:04	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/26/11 13:04	
Trichloroethene	ug/L	ND	5.0	01/26/11 13:04	
Vinyl chloride	ug/L	ND	2.0	01/26/11 13:04	
Xylene (Total)	ug/L	ND	10.0	01/26/11 13:04	
4-Bromofluorobenzene (S)	%	94	70-126	01/26/11 13:04	
Dibromofluoromethane (S)	%	98	80-123	01/26/11 13:04	
Toluene-d8 (S)	%	99	80-116	01/26/11 13:04	

LABORATORY CONTROL SAMPLE: 532173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.0	96	69-136	
1,1-Dichloroethane	ug/L	50	48.9	98	67-133	
1,1-Dichloroethene	ug/L	50	54.2	108	63-128	
1,2-Dichloroethane	ug/L	50	47.9	96	69-139	
Benzene	ug/L	50	50.3	101	78-127	
Carbon tetrachloride	ug/L	50	47.7	95	62-143	
Chloroform	ug/L	50	47.1	94	74-131	
cis-1,2-Dichloroethene	ug/L	50	51.9	104	74-128	
Ethylbenzene	ug/L	50	48.4	97	81-126	
Methylene chloride	ug/L	50	48.8	98	32-164	
Naphthalene	ug/L	50	48.6	97	61-135	
Tetrachloroethene	ug/L	50	46.6	93	60-119	
Toluene	ug/L	50	48.5	97	75-129	
trans-1,2-Dichloroethene	ug/L	50	49.3	99	71-126	
Trichloroethene	ug/L	50	48.5	97	74-130	
Vinyl chloride	ug/L	50	42.5	85	55-141	
Xylene (Total)	ug/L	150	141	94	76-132	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

LABORATORY CONTROL SAMPLE: 532173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			102	70-126	
Dibromofluoromethane (S)	%			99	80-123	
Toluene-d8 (S)	%			98	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 532174 532175

Parameter	Units	5045269002		MS		MSD		MS		MSD		% Rec Limits	RPD	RPD	Max Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MS Result	MSD % Rec	MS Result	MSD % Rec				
1,1,1-Trichloroethane	ug/L	ND	50	50	35.3	38.2	71	76	64-143	8	20				
1,1-Dichloroethane	ug/L	ND	50	50	35.4	37.9	71	76	68-139	7	20				
1,1-Dichloroethene	ug/L	ND	50	50	33.8	34.1	68	68	55-140	.8	20				
1,2-Dichloroethane	ug/L	ND	50	50	36.5	39.1	73	78	63-148	7	20				
Benzene	ug/L	ND	50	50	37.0	39.6	74	79	63-141	7	20				
Carbon tetrachloride	ug/L	ND	50	50	35.2	38.0	70	76	54-145	8	20				
Chloroform	ug/L	ND	50	50	36.0	38.4	72	77	67-134	6	20				
cis-1,2-Dichloroethene	ug/L	14.1	50	50	48.5	52.1	69	76	65-132	7	20				
Ethylbenzene	ug/L	ND	50	50	36.7	39.7	73	79	44-151	8	20				
Methylene chloride	ug/L	ND	50	50	31.2	33.1	62	66	46-154	6	20				
Naphthalene	ug/L	ND	50	50	34.7	36.8	69	74	44-138	6	20				
Tetrachloroethene	ug/L	ND	50	50	35.7	39.6	71	79	25-146	10	20				
Toluene	ug/L	ND	50	50	36.9	39.8	74	80	59-142	7	20				
trans-1,2-Dichloroethene	ug/L	ND	50	50	35.0	37.5	70	75	60-137	7	20				
Trichloroethene	ug/L	ND	50	50	36.8	40.2	74	80	61-137	9	20				
Vinyl chloride	ug/L	ND	50	50	21.7	22.3	43	45	51-144	2	20	M0			
Xylene (Total)	ug/L	ND	150	150	107	110	72	73	44-152	2	20				
4-Bromofluorobenzene (S)	%						101	102	70-126		20				
Dibromofluoromethane (S)	%						101	101	80-123		20				
Toluene-d8 (S)	%						99	99	80-116		20				

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

QC Batch: WETA/5988 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.  
Associated Lab Samples: 5045232001, 5045232003, 5045232005, 5045232011, 5045232012, 5045232013, 5045232016, 5045232017

METHOD BLANK: 530559 Matrix: Water

Associated Lab Samples: 5045232001, 5045232003, 5045232005, 5045232011, 5045232012, 5045232013, 5045232016, 5045232017

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Nitrogen, Nitrate	mg/L	ND	0.10	01/20/11 13:58	

LABORATORY CONTROL SAMPLE: 530560

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Nitrogen, Nitrate	mg/L	2	2.1	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 530561 530562

Parameter	Units	5045232003	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		Result	Spike	Spike										
Nitrogen, Nitrate	mg/L	0.22	2	2	2.0	2.0	2.0	88	88	90-110	.08	20	M3	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
 Pace Project No.: 5045232

QC Batch:	WETA/5999	Analysis Method:	ASTM D516-90,02
QC Batch Method:	ASTM D516-90,02	Analysis Description:	ASTM D516-9002 Sulfate Water
Associated Lab Samples:	5045232001, 5045232003, 5045232005, 5045232011, 5045232012, 5045232013, 5045232016, 5045232017		

METHOD BLANK:	531545	Matrix:	Water
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Associated Lab Samples: 5045232001, 5045232003, 5045232005, 5045232011, 5045232012, 5045232013, 5045232016, 5045232017

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
Sulfate	mg/L	ND	5.0	01/25/11 13:35	

LABORATORY CONTROL SAMPLE:	531546
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Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Sulfate	mg/L	20	20.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:	531547	531548
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Parameter	Units	5045232003	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		Result	Spike	Spike										
Sulfate	mg/L	83.2	100	100	187	192	104	108	90-110	90-110	2	20		

MATRIX SPIKE SAMPLE:	531549
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Parameter	Units	5045269007	Spike	MS	MS	MS	MSD	% Rec	% Rec	Limits	Qualifiers
		Result	Conc.	Result	% Rec						
Sulfate	mg/L	82.0	100	188	106	90-110					

## QUALIFIERS

Project: Michigan Plaza M01046

Pace Project No.: 5045232

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### ANALYTE QUALIFIERS

- 1d Benzene ND at an estimated RL of 5ug/L, based on the MDL. aa 1/25/11
- 2d PCE ND at an estimated RL of 5ug/L, based on the MDL. aa 1/25/11
- 3d TCE ND at an estimated RL of 5ug/L, based on the MDL. aa 1/25/11
- D4 Sample was diluted due to the presence of high levels of target analytes.
- L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
- M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Michigan Plaza M01046  
Pace Project No.: 5045232

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5045232003	MMW-9S	SM 2340B	ICP/6467		
5045232017	Dup 1	SM 2340B	ICP/6467		
5045232001	MMW-1S	EPA 8260	MSV/29817		
5045232002	MMW-8S	EPA 8260	MSV/29817		
5045232003	MMW-9S	EPA 8260	MSV/29817		
5045232004	MMW-10S	EPA 8260	MSV/29817		
5045232005	MMW-11S	EPA 8260	MSV/29817		
5045232006	MMW-11D	EPA 8260	MSV/29817		
5045232007	MMW-12S	EPA 8260	MSV/29817		
5045232008	MMW-13D	EPA 8260	MSV/29817		
5045232009	MMW-14D	EPA 8260	MSV/29835		
5045232010	MMW-P-02	EPA 8260	MSV/29835		
5045232011	MMW-P-03S	EPA 8260	MSV/29835		
5045232012	MMW-P-03D	EPA 8260	MSV/29835		
5045232013	MMW-P-09S	EPA 8260	MSV/29835		
5045232014	MMW-P-09D	EPA 8260	MSV/29835		
5045232015	MMW-C-01	EPA 8260	MSV/29835		
5045232016	MMW-C-02	EPA 8260	MSV/29835		
5045232017	Dup 1	EPA 8260	MSV/29863		
5045232001	MMW-1S	EPA 353.2	WETA/5988		
5045232003	MMW-9S	EPA 353.2	WETA/5988		
5045232005	MMW-11S	EPA 353.2	WETA/5988		
5045232011	MMW-P-03S	EPA 353.2	WETA/5988		
5045232012	MMW-P-03D	EPA 353.2	WETA/5988		
5045232013	MMW-P-09S	EPA 353.2	WETA/5988		
5045232016	MMW-C-02	EPA 353.2	WETA/5988		
5045232017	Dup 1	EPA 353.2	WETA/5988		
5045232001	MMW-1S	ASTM D516-90,02	WETA/5999		
5045232003	MMW-9S	ASTM D516-90,02	WETA/5999		
5045232005	MMW-11S	ASTM D516-90,02	WETA/5999		
5045232011	MMW-P-03S	ASTM D516-90,02	WETA/5999		
5045232012	MMW-P-03D	ASTM D516-90,02	WETA/5999		
5045232013	MMW-P-09S	ASTM D516-90,02	WETA/5999		
5045232016	MMW-C-02	ASTM D516-90,02	WETA/5999		
5045232017	Dup 1	ASTM D516-90,02	WETA/5999		

Date: 02/03/2011 02:24 PM

**REPORT OF LABORATORY ANALYSIS**

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February 03, 2011

Ms. Sarah Webb  
Mundell & Associates  
110 South Downey Ave.  
Indianapolis, IN 46219

RE: Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Dear Ms. Webb:

Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tina Sayer

tina.sayer@pacelabs.com  
Project Manager

Illinois/NELAC Certification #: 100418

Indiana Certification #: C-49-06

Kansas Certification #: E-10247

Kentucky Certification #: 0042

Louisiana Certification #: 04076

Ohio VAP: CL0065

Pennsylvania: 68-00791

West Virginia Certification #: 330

Enclosures

cc: Jelling Lai, Mundell & Associates

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Michigan Plaza M01046  
 Pace Project No.: 5045269

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5045269001	<b>MMW-P-01</b>	Water	01/20/11 15:55	01/21/11 11:10
5045269002	<b>MMW-P-05</b>	Water	01/20/11 11:42	01/21/11 11:10
5045269003	<b>MMW-P-06</b>	Water	01/20/11 15:17	01/21/11 11:10
5045269004	<b>MMW-P-07</b>	Water	01/20/11 13:45	01/21/11 11:10
5045269005	<b>MMW-P-08</b>	Water	01/20/11 14:32	01/21/11 11:10
5045269006	<b>MMW-P-10S</b>	Water	01/20/11 12:25	01/21/11 11:10
5045269007	<b>MMW-P-10D</b>	Water	01/20/11 13:02	01/21/11 11:10
5045269008	Dup2	Water	01/20/11 08:00	01/21/11 11:10
5045269009	Trip Blank	Water	01/20/11 08:00	01/21/11 11:10
5045269010	EQ Blank	Water	01/20/11 16:50	01/21/11 11:10

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5045269001	MMW-P-01	EPA 8260	ALA	20
5045269002	MMW-P-05	EPA 8260	ALA	20
5045269003	MMW-P-06	EPA 8260	ALA	20
		EPA 353.2	DDM	1
		ASTM D516-90,02	JTP	1
5045269004	MMW-P-07	EPA 8260	ALA	20
5045269005	MMW-P-08	SM 2340B	FRW	1
		EPA 8260	ALA	20
		EPA 353.2	DDM	1
		ASTM D516-90,02	JTP	1
5045269006	MMW-P-10S	EPA 8260	ALA	20
		EPA 353.2	DDM	1
		ASTM D516-90,02	JTP	1
5045269007	MMW-P-10D	EPA 8260	ALA	20
		EPA 353.2	DDM	1
		ASTM D516-90,02	JTP	1
5045269008	Dup2	EPA 8260	ALA	20
5045269009	Trip Blank	EPA 8260	ALA	20
5045269010	EQ Blank	EPA 8260	ALA	20

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-01	Lab ID: 5045269001	Collected: 01/20/11 15:55	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		50.0	10		01/25/11 21:59	71-43-2	2d
Carbon tetrachloride	ND ug/L		50.0	10		01/25/11 21:59	56-23-5	
Chloroform	ND ug/L		50.0	10		01/25/11 21:59	67-66-3	
1,1-Dichloroethane	ND ug/L		50.0	10		01/25/11 21:59	75-34-3	
1,2-Dichloroethane	ND ug/L		50.0	10		01/25/11 21:59	107-06-2	
1,1-Dichloroethene	ND ug/L		50.0	10		01/25/11 21:59	75-35-4	
cis-1,2-Dichloroethene	1960 ug/L		50.0	10		01/25/11 21:59	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		50.0	10		01/25/11 21:59	156-60-5	
Ethylbenzene	ND ug/L		50.0	10		01/25/11 21:59	100-41-4	
Methylene chloride	ND ug/L		50.0	10		01/25/11 21:59	75-09-2	
Naphthalene	ND ug/L		50.0	10		01/25/11 21:59	91-20-3	
Tetrachloroethene	153 ug/L		50.0	10		01/25/11 21:59	127-18-4	
Toluene	ND ug/L		50.0	10		01/25/11 21:59	108-88-3	
1,1,1-Trichloroethane	ND ug/L		50.0	10		01/25/11 21:59	71-55-6	
Trichloroethene	140 ug/L		50.0	10		01/25/11 21:59	79-01-6	
Vinyl chloride	11100 ug/L		200	100		01/25/11 22:32	75-01-4	
Xylene (Total)	ND ug/L		100	10		01/25/11 21:59	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	10		01/25/11 21:59	1868-53-7	3d
4-Bromofluorobenzene (S)	93 %		70-126	10		01/25/11 21:59	460-00-4	
Toluene-d8 (S)	99 %		80-116	10		01/25/11 21:59	2037-26-5	

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## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-05	Lab ID: 5045269002	Collected: 01/20/11 11:42	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/26/11 13:56	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/26/11 13:56	56-23-5	
Chloroform	ND ug/L		5.0	1		01/26/11 13:56	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/26/11 13:56	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/26/11 13:56	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/26/11 13:56	75-35-4	
cis-1,2-Dichloroethene	14.1 ug/L		5.0	1		01/26/11 13:56	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/26/11 13:56	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/26/11 13:56	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/26/11 13:56	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/26/11 13:56	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/26/11 13:56	127-18-4	
Toluene	ND ug/L		5.0	1		01/26/11 13:56	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/26/11 13:56	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/26/11 13:56	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		01/26/11 13:56	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/26/11 13:56	1330-20-7	
Dibromofluoromethane (S)	100 %		80-123	1		01/26/11 13:56	1868-53-7	
4-Bromofluorobenzene (S)	95 %		70-126	1		01/26/11 13:56	460-00-4	
Toluene-d8 (S)	100 %		80-116	1		01/26/11 13:56	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-06	Lab ID: 5045269003	Collected: 01/20/11 15:17	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	100	20		01/26/11 15:14	71-43-2	1d
Carbon tetrachloride	ND	ug/L	100	20		01/26/11 15:14	56-23-5	
Chloroform	ND	ug/L	100	20		01/26/11 15:14	67-66-3	
1,1-Dichloroethane	ND	ug/L	100	20		01/26/11 15:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	100	20		01/26/11 15:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	100	20		01/26/11 15:14	75-35-4	
cis-1,2-Dichloroethene	<b>2700</b>	ug/L	100	20		01/26/11 15:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	100	20		01/26/11 15:14	156-60-5	
Ethylbenzene	ND	ug/L	100	20		01/26/11 15:14	100-41-4	
Methylene chloride	ND	ug/L	100	20		01/26/11 15:14	75-09-2	
Naphthalene	ND	ug/L	100	20		01/26/11 15:14	91-20-3	
Tetrachloroethene	ND	ug/L	100	20		01/26/11 15:14	127-18-4	5d
Toluene	ND	ug/L	100	20		01/26/11 15:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	100	20		01/26/11 15:14	71-55-6	
Trichloroethene	ND	ug/L	100	20		01/26/11 15:14	79-01-6	6d
Vinyl chloride	<b>15000</b>	ug/L	400	200		01/26/11 15:40	75-01-4	
Xylene (Total)	ND	ug/L	200	20		01/26/11 15:14	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	20		01/26/11 15:14	1868-53-7	4d
4-Bromofluorobenzene (S)	95 %		70-126	20		01/26/11 15:14	460-00-4	
Toluene-d8 (S)	99 %		80-116	20		01/26/11 15:14	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		01/21/11 16:04		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>65.8</b>	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-07	Lab ID: 5045269004	Collected: 01/20/11 13:45	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/28/11 05:16	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/28/11 05:16	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/28/11 05:16	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/28/11 05:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/28/11 05:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/28/11 05:16	75-35-4	
cis-1,2-Dichloroethene	295	ug/L	5.0	1		01/28/11 05:16	156-59-2	
trans-1,2-Dichloroethene	13.9	ug/L	5.0	1		01/28/11 05:16	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/28/11 05:16	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/28/11 05:16	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/28/11 05:16	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/28/11 05:16	127-18-4	
Toluene	ND	ug/L	5.0	1		01/28/11 05:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/28/11 05:16	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/28/11 05:16	79-01-6	
Vinyl chloride	562	ug/L	10.0	5		01/26/11 16:06	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/28/11 05:16	1330-20-7	
Dibromofluoromethane (S)	92 %		80-123	1		01/28/11 05:16	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/28/11 05:16	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/28/11 05:16	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-08	Lab ID: 5045269005	Collected: 01/20/11 14:32	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>2340B Hardness, Total (Calc.)</b>	Analytical Method: SM 2340B							
Total Hardness	<b>688</b>	mg/L		1		02/03/11 10:22		
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/26/11 16:58	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/26/11 16:58	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/26/11 16:58	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/26/11 16:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/26/11 16:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/26/11 16:58	75-35-4	
cis-1,2-Dichloroethene	<b>590</b>	ug/L	50.0	10		01/26/11 17:24	156-59-2	
trans-1,2-Dichloroethene	<b>14.8</b>	ug/L	5.0	1		01/26/11 16:58	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/26/11 16:58	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/26/11 16:58	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/26/11 16:58	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/26/11 16:58	127-18-4	
Toluene	ND	ug/L	5.0	1		01/26/11 16:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/26/11 16:58	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/26/11 16:58	79-01-6	
Vinyl chloride	<b>1770</b>	ug/L	20.0	10		01/26/11 17:24	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/26/11 16:58	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/26/11 16:58	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		01/26/11 16:58	460-00-4	
Toluene-d8 (S)	100 %		80-116	1		01/26/11 16:58	2037-26-5	
<b>353.2 Nitrogen, NO2/NO3 unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		01/21/11 16:03		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>21.0</b>	mg/L	5.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-10S	Lab ID: 5045269006	Collected: 01/20/11 12:25	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/28/11 05:41	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/28/11 05:41	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/28/11 05:41	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/28/11 05:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/28/11 05:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/28/11 05:41	75-35-4	
cis-1,2-Dichloroethene	11.7	ug/L	5.0	1		01/28/11 05:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/28/11 05:41	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/28/11 05:41	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/28/11 05:41	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/28/11 05:41	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/28/11 05:41	127-18-4	
Toluene	ND	ug/L	5.0	1		01/28/11 05:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/28/11 05:41	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/28/11 05:41	79-01-6	
Vinyl chloride	27.8	ug/L	2.0	1		01/28/11 05:41	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/28/11 05:41	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/28/11 05:41	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/28/11 05:41	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/28/11 05:41	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	0.12	mg/L	0.10	1		01/21/11 16:07		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	29.2	mg/L	5.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: MMW-P-10D	Lab ID: 5045269007	Collected: 01/20/11 13:02	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		01/28/11 06:33	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		01/28/11 06:33	56-23-5	
Chloroform	ND	ug/L	5.0	1		01/28/11 06:33	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		01/28/11 06:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		01/28/11 06:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		01/28/11 06:33	75-35-4	
cis-1,2-Dichloroethene	<b>21.4</b>	ug/L	5.0	1		01/28/11 06:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		01/28/11 06:33	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		01/28/11 06:33	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		01/28/11 06:33	75-09-2	
Naphthalene	ND	ug/L	5.0	1		01/28/11 06:33	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		01/28/11 06:33	127-18-4	
Toluene	ND	ug/L	5.0	1		01/28/11 06:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		01/28/11 06:33	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		01/28/11 06:33	79-01-6	
Vinyl chloride	<b>1210</b>	ug/L	20.0	10		01/28/11 06:59	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		01/28/11 06:33	1330-20-7	
Dibromofluoromethane (S)	99 %		80-123	1		01/28/11 06:33	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		01/28/11 06:33	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/28/11 06:33	2037-26-5	
<b>353.2 Nitrogen, NO<sub>2</sub>/NO<sub>3</sub> unpres</b>	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	<b>0.19</b>	mg/L	0.10	1		01/21/11 16:02		
<b>ASTM D516-9002 Sulfate Water</b>	Analytical Method: ASTM D516-90,02							
Sulfate	<b>82.0</b>	mg/L	25.0	1		01/25/11 13:35	14808-79-8	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: Dup2	Lab ID: 5045269008	Collected: 01/20/11 08:00	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/28/11 15:15	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/28/11 15:15	56-23-5	
Chloroform	ND ug/L		5.0	1		01/28/11 15:15	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/28/11 15:15	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/28/11 15:15	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/28/11 15:15	75-35-4	
cis-1,2-Dichloroethene	18.5 ug/L		5.0	1		01/28/11 15:15	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/28/11 15:15	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/28/11 15:15	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/28/11 15:15	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/28/11 15:15	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/28/11 15:15	127-18-4	
Toluene	ND ug/L		5.0	1		01/28/11 15:15	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/28/11 15:15	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/28/11 15:15	79-01-6	
Vinyl chloride	4.4 ug/L		2.0	1		01/28/11 15:15	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/28/11 15:15	1330-20-7	
Dibromofluoromethane (S)	94 %		80-123	1		01/28/11 15:15	1868-53-7	
4-Bromofluorobenzene (S)	98 %		70-126	1		01/28/11 15:15	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/28/11 15:15	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: Trip Blank	Lab ID: 5045269009	Collected: 01/20/11 08:00	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/28/11 16:07	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/28/11 16:07	56-23-5	
Chloroform	ND ug/L		5.0	1		01/28/11 16:07	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/28/11 16:07	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/28/11 16:07	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/28/11 16:07	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		01/28/11 16:07	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/28/11 16:07	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/28/11 16:07	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/28/11 16:07	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/28/11 16:07	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/28/11 16:07	127-18-4	
Toluene	ND ug/L		5.0	1		01/28/11 16:07	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/28/11 16:07	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/28/11 16:07	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		01/28/11 16:07	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/28/11 16:07	1330-20-7	
Dibromofluoromethane (S)	96 %		80-123	1		01/28/11 16:07	1868-53-7	
4-Bromofluorobenzene (S)	96 %		70-126	1		01/28/11 16:07	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/28/11 16:07	2037-26-5	

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## ANALYTICAL RESULTS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Sample: EQ Blank	Lab ID: 5045269010	Collected: 01/20/11 16:50	Received: 01/21/11 11:10	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		01/28/11 16:33	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		01/28/11 16:33	56-23-5	
Chloroform	ND ug/L		5.0	1		01/28/11 16:33	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		01/28/11 16:33	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		01/28/11 16:33	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		01/28/11 16:33	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		01/28/11 16:33	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		01/28/11 16:33	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		01/28/11 16:33	100-41-4	
Methylene chloride	ND ug/L		5.0	1		01/28/11 16:33	75-09-2	
Naphthalene	ND ug/L		5.0	1		01/28/11 16:33	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		01/28/11 16:33	127-18-4	
Toluene	ND ug/L		5.0	1		01/28/11 16:33	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		01/28/11 16:33	71-55-6	
Trichloroethene	ND ug/L		5.0	1		01/28/11 16:33	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		01/28/11 16:33	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		01/28/11 16:33	1330-20-7	
Dibromofluoromethane (S)	98 %		80-123	1		01/28/11 16:33	1868-53-7	
4-Bromofluorobenzene (S)	97 %		70-126	1		01/28/11 16:33	460-00-4	
Toluene-d8 (S)	99 %		80-116	1		01/28/11 16:33	2037-26-5	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

QC Batch:	MSV/29835	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	5045269001		

METHOD BLANK: 531710                                  Matrix: Water

Associated Lab Samples: 5045269001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/25/11 12:43	
1,1-Dichloroethane	ug/L	ND	5.0	01/25/11 12:43	
1,1-Dichloroethene	ug/L	ND	5.0	01/25/11 12:43	
1,2-Dichloroethane	ug/L	ND	5.0	01/25/11 12:43	
Benzene	ug/L	ND	5.0	01/25/11 12:43	
Carbon tetrachloride	ug/L	ND	5.0	01/25/11 12:43	
Chloroform	ug/L	ND	5.0	01/25/11 12:43	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/25/11 12:43	
Ethylbenzene	ug/L	ND	5.0	01/25/11 12:43	
Methylene chloride	ug/L	ND	5.0	01/25/11 12:43	
Naphthalene	ug/L	ND	5.0	01/25/11 12:43	
Tetrachloroethene	ug/L	ND	5.0	01/25/11 12:43	
Toluene	ug/L	ND	5.0	01/25/11 12:43	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/25/11 12:43	
Trichloroethene	ug/L	ND	5.0	01/25/11 12:43	
Vinyl chloride	ug/L	ND	2.0	01/25/11 12:43	
Xylene (Total)	ug/L	ND	10.0	01/25/11 12:43	
4-Bromofluorobenzene (S)	%	97	70-126	01/25/11 12:43	
Dibromofluoromethane (S)	%	98	80-123	01/25/11 12:43	
Toluene-d8 (S)	%	99	80-116	01/25/11 12:43	

LABORATORY CONTROL SAMPLE: 531711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	38.0	76	69-136	
1,1-Dichloroethane	ug/L	50	39.8	80	67-133	
1,1-Dichloroethene	ug/L	50	42.7	85	63-128	
1,2-Dichloroethane	ug/L	50	40.1	80	69-139	
Benzene	ug/L	50	40.8	82	78-127	
Carbon tetrachloride	ug/L	50	38.3	77	62-143	
Chloroform	ug/L	50	40.1	80	74-131	
cis-1,2-Dichloroethene	ug/L	50	41.3	83	74-128	
Ethylbenzene	ug/L	50	39.4	79	81-126 L0	
Methylene chloride	ug/L	50	38.8	78	32-164	
Naphthalene	ug/L	50	41.4	83	61-135	
Tetrachloroethene	ug/L	50	38.8	78	60-119	
Toluene	ug/L	50	42.0	84	75-129	
trans-1,2-Dichloroethene	ug/L	50	40.0	80	71-126	
Trichloroethene	ug/L	50	41.8	84	74-130	
Vinyl chloride	ug/L	50	37.6	75	55-141	
Xylene (Total)	ug/L	150	114	76	76-132	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

LABORATORY CONTROL SAMPLE: 531711

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			102	70-126	
Dibromofluoromethane (S)	%			101	80-123	
Toluene-d8 (S)	%			99	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 531712      531713

Parameter	Units	5045232010		MS		MSD		MS		MSD		% Rec Limits	RPD	RPD	Max Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	% Rec	MSD % Rec	% Rec Limits				
1,1,1-Trichloroethane	ug/L	ND	50	50	40.7	45.2	81	90	64-143	11	20				
1,1-Dichloroethane	ug/L	ND	50	50	43.1	47.7	86	95	68-139	10	20				
1,1-Dichloroethene	ug/L	ND	50	50	47.5	51.9	95	104	55-140	9	20				
1,2-Dichloroethane	ug/L	ND	50	50	43.4	47.8	87	96	63-148	10	20				
Benzene	ug/L	ND	50	50	44.4	48.7	89	97	63-141	9	20				
Carbon tetrachloride	ug/L	ND	50	50	39.4	44.2	79	88	54-145	12	20				
Chloroform	ug/L	ND	50	50	43.6	47.8	87	96	67-134	9	20				
cis-1,2-Dichloroethene	ug/L	64.3	50	50	105	112	82	95	65-132	6	20				
Ethylbenzene	ug/L	ND	50	50	42.5	46.5	85	93	44-151	9	20				
Methylene chloride	ug/L	ND	50	50	43.0	47.5	86	95	46-154	10	20				
Naphthalene	ug/L	ND	50	50	43.0	47.7	86	95	44-138	10	20				
Tetrachloroethene	ug/L	15.9	50	50	47.0	50.4	62	69	25-146	7	20				
Toluene	ug/L	ND	50	50	45.3	48.8	91	98	59-142	7	20				
trans-1,2-Dichloroethene	ug/L	14.0	50	50	48.0	52.4	68	77	60-137	9	20				
Trichloroethene	ug/L	ND	50	50	45.3	49.0	91	98	61-137	8	20				
Vinyl chloride	ug/L	396	50	50	431	449	72	108	51-144	4	20				
Xylene (Total)	ug/L	ND	150	150	122	133	81	89	44-152	9	20				
4-Bromofluorobenzene (S)	%						101	101	70-126		20				
Dibromofluoromethane (S)	%						100	102	80-123		20				
Toluene-d8 (S)	%						99	97	80-116		20				

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

QC Batch:	MSV/29863	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	5045269002, 5045269003, 5045269005		

METHOD BLANK: 532172                                  Matrix: Water

Associated Lab Samples: 5045269002, 5045269003, 5045269005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/26/11 13:04	
1,1-Dichloroethane	ug/L	ND	5.0	01/26/11 13:04	
1,1-Dichloroethene	ug/L	ND	5.0	01/26/11 13:04	
1,2-Dichloroethane	ug/L	ND	5.0	01/26/11 13:04	
Benzene	ug/L	ND	5.0	01/26/11 13:04	
Carbon tetrachloride	ug/L	ND	5.0	01/26/11 13:04	
Chloroform	ug/L	ND	5.0	01/26/11 13:04	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/26/11 13:04	
Ethylbenzene	ug/L	ND	5.0	01/26/11 13:04	
Methylene chloride	ug/L	ND	5.0	01/26/11 13:04	
Naphthalene	ug/L	ND	5.0	01/26/11 13:04	
Tetrachloroethene	ug/L	ND	5.0	01/26/11 13:04	
Toluene	ug/L	ND	5.0	01/26/11 13:04	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/26/11 13:04	
Trichloroethene	ug/L	ND	5.0	01/26/11 13:04	
Vinyl chloride	ug/L	ND	2.0	01/26/11 13:04	
Xylene (Total)	ug/L	ND	10.0	01/26/11 13:04	
4-Bromofluorobenzene (S)	%	94	70-126	01/26/11 13:04	
Dibromofluoromethane (S)	%	98	80-123	01/26/11 13:04	
Toluene-d8 (S)	%	99	80-116	01/26/11 13:04	

LABORATORY CONTROL SAMPLE: 532173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.0	96	69-136	
1,1-Dichloroethane	ug/L	50	48.9	98	67-133	
1,1-Dichloroethene	ug/L	50	54.2	108	63-128	
1,2-Dichloroethane	ug/L	50	47.9	96	69-139	
Benzene	ug/L	50	50.3	101	78-127	
Carbon tetrachloride	ug/L	50	47.7	95	62-143	
Chloroform	ug/L	50	47.1	94	74-131	
cis-1,2-Dichloroethene	ug/L	50	51.9	104	74-128	
Ethylbenzene	ug/L	50	48.4	97	81-126	
Methylene chloride	ug/L	50	48.8	98	32-164	
Naphthalene	ug/L	50	48.6	97	61-135	
Tetrachloroethene	ug/L	50	46.6	93	60-119	
Toluene	ug/L	50	48.5	97	75-129	
trans-1,2-Dichloroethene	ug/L	50	49.3	99	71-126	
Trichloroethene	ug/L	50	48.5	97	74-130	
Vinyl chloride	ug/L	50	42.5	85	55-141	
Xylene (Total)	ug/L	150	141	94	76-132	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

LABORATORY CONTROL SAMPLE: 532173

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			102	70-126	
Dibromofluoromethane (S)	%			99	80-123	
Toluene-d8 (S)	%			98	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 532174 532175

Parameter	Units	5045269002		MS		MSD		MS		MSD		% Rec Limits	RPD	RPD	Max Qual
		Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	% Rec	MSD % Rec	% Rec Limits				
1,1,1-Trichloroethane	ug/L	ND	50	50	35.3	38.2	71	76	64-143	8	20				
1,1-Dichloroethane	ug/L	ND	50	50	35.4	37.9	71	76	68-139	7	20				
1,1-Dichloroethene	ug/L	ND	50	50	33.8	34.1	68	68	55-140	.8	20				
1,2-Dichloroethane	ug/L	ND	50	50	36.5	39.1	73	78	63-148	7	20				
Benzene	ug/L	ND	50	50	37.0	39.6	74	79	63-141	7	20				
Carbon tetrachloride	ug/L	ND	50	50	35.2	38.0	70	76	54-145	8	20				
Chloroform	ug/L	ND	50	50	36.0	38.4	72	77	67-134	6	20				
cis-1,2-Dichloroethene	ug/L	14.1	50	50	48.5	52.1	69	76	65-132	7	20				
Ethylbenzene	ug/L	ND	50	50	36.7	39.7	73	79	44-151	8	20				
Methylene chloride	ug/L	ND	50	50	31.2	33.1	62	66	46-154	6	20				
Naphthalene	ug/L	ND	50	50	34.7	36.8	69	74	44-138	6	20				
Tetrachloroethene	ug/L	ND	50	50	35.7	39.6	71	79	25-146	10	20				
Toluene	ug/L	ND	50	50	36.9	39.8	74	80	59-142	7	20				
trans-1,2-Dichloroethene	ug/L	ND	50	50	35.0	37.5	70	75	60-137	7	20				
Trichloroethene	ug/L	ND	50	50	36.8	40.2	74	80	61-137	9	20				
Vinyl chloride	ug/L	ND	50	50	21.7	22.3	43	45	51-144	2	20	M0			
Xylene (Total)	ug/L	ND	150	150	107	110	72	73	44-152	2	20				
4-Bromofluorobenzene (S)	%						101	102	70-126		20				
Dibromofluoromethane (S)	%						101	101	80-123		20				
Toluene-d8 (S)	%						99	99	80-116		20				

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

QC Batch:	MSV/29885	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	5045269004, 5045269006, 5045269007		

METHOD BLANK: 532599                                  Matrix: Water

Associated Lab Samples: 5045269004, 5045269006, 5045269007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/27/11 23:12	
1,1-Dichloroethane	ug/L	ND	5.0	01/27/11 23:12	
1,1-Dichloroethene	ug/L	ND	5.0	01/27/11 23:12	
1,2-Dichloroethane	ug/L	ND	5.0	01/27/11 23:12	
Benzene	ug/L	ND	5.0	01/27/11 23:12	
Carbon tetrachloride	ug/L	ND	5.0	01/27/11 23:12	
Chloroform	ug/L	ND	5.0	01/27/11 23:12	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/27/11 23:12	
Ethylbenzene	ug/L	ND	5.0	01/27/11 23:12	
Methylene chloride	ug/L	ND	5.0	01/27/11 23:12	
Naphthalene	ug/L	ND	5.0	01/27/11 23:12	
Tetrachloroethene	ug/L	ND	5.0	01/27/11 23:12	
Toluene	ug/L	ND	5.0	01/27/11 23:12	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/27/11 23:12	
Trichloroethene	ug/L	ND	5.0	01/27/11 23:12	
Vinyl chloride	ug/L	ND	2.0	01/27/11 23:12	
Xylene (Total)	ug/L	ND	10.0	01/27/11 23:12	
4-Bromofluorobenzene (S)	%	99	70-126	01/27/11 23:12	
Dibromofluoromethane (S)	%	99	80-123	01/27/11 23:12	
Toluene-d8 (S)	%	98	80-116	01/27/11 23:12	

LABORATORY CONTROL SAMPLE: 532600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	42.2	84	69-136	
1,1-Dichloroethane	ug/L	50	44.5	89	67-133	
1,1-Dichloroethene	ug/L	50	47.2	94	63-128	
1,2-Dichloroethane	ug/L	50	44.6	89	69-139	
Benzene	ug/L	50	46.0	92	78-127	
Carbon tetrachloride	ug/L	50	40.2	80	62-143	
Chloroform	ug/L	50	45.2	90	74-131	
cis-1,2-Dichloroethene	ug/L	50	46.6	93	74-128	
Ethylbenzene	ug/L	50	43.0	86	81-126	
Methylene chloride	ug/L	50	40.6	81	32-164	
Naphthalene	ug/L	50	45.3	91	61-135	
Tetrachloroethene	ug/L	50	41.4	83	60-119	
Toluene	ug/L	50	45.9	92	75-129	
trans-1,2-Dichloroethene	ug/L	50	45.2	90	71-126	
Trichloroethene	ug/L	50	46.6	93	74-130	
Vinyl chloride	ug/L	50	43.4	87	55-141	
Xylene (Total)	ug/L	150	125	83	76-132	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

LABORATORY CONTROL SAMPLE: 532600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			103	70-126	
Dibromofluoromethane (S)	%			101	80-123	
Toluene-d8 (S)	%			100	80-116	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 532601 532602

Parameter	Units	5045306001		MS		MSD		MS		MSD		% Rec Limits	RPD	RPD	Max Qual
		Result	Spike Conc.	Spike Conc.	Result	MSD	Result	% Rec	MSD	% Rec	MSD				
1,1,1-Trichloroethane	ug/L	ND	50	50	52.1	51.8	104	104	64-143	.6	20				
1,1-Dichloroethane	ug/L	ND	50	50	54.9	53.6	110	107	68-139	2	20				
1,1-Dichloroethene	ug/L	ND	50	50	59.1	57.7	118	115	55-140	2	20				
1,2-Dichloroethane	ug/L	ND	50	50	54.2	53.2	108	106	63-148	2	20				
Benzene	ug/L	ND	50	50	56.4	55.3	113	111	63-141	2	20				
Carbon tetrachloride	ug/L	ND	50	50	48.4	48.6	97	97	54-145	.3	20				
Chloroform	ug/L	ND	50	50	54.9	53.9	110	108	67-134	2	20				
cis-1,2-Dichloroethene	ug/L	ND	50	50	57.6	56.0	115	112	65-132	3	20				
Ethylbenzene	ug/L	ND	50	50	53.8	53.2	108	106	44-151	1	20				
Methylene chloride	ug/L	ND	50	50	54.1	52.1	101	97	46-154	4	20				
Naphthalene	ug/L	ND	50	50	52.4	52.2	105	104	44-138	.4	20				
Tetrachloroethene	ug/L	ND	50	50	50.0	49.1	100	98	25-146	2	20				
Toluene	ug/L	ND	50	50	55.7	54.9	111	110	59-142	1	20				
trans-1,2-Dichloroethene	ug/L	ND	50	50	54.9	54.5	110	109	60-137	.7	20				
Trichloroethene	ug/L	ND	50	50	56.3	55.1	113	110	61-137	2	20				
Vinyl chloride	ug/L	ND	50	50	55.7	54.6	111	109	51-144	2	20				
Xylene (Total)	ug/L	ND	150	150	153	150	102	100	44-152	2	20				
4-Bromofluorobenzene (S)	%						103	103	70-126		20				
Dibromofluoromethane (S)	%						101	100	80-123		20				
Toluene-d8 (S)	%						98	99	80-116		20				

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

QC Batch:	MSV/29922	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	5045269008, 5045269009, 5045269010		

METHOD BLANK: 533209                                  Matrix: Water

Associated Lab Samples: 5045269008, 5045269009, 5045269010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	01/28/11 12:39	
1,1-Dichloroethane	ug/L	ND	5.0	01/28/11 12:39	
1,1-Dichloroethene	ug/L	ND	5.0	01/28/11 12:39	
1,2-Dichloroethane	ug/L	ND	5.0	01/28/11 12:39	
Benzene	ug/L	ND	5.0	01/28/11 12:39	
Carbon tetrachloride	ug/L	ND	5.0	01/28/11 12:39	
Chloroform	ug/L	ND	5.0	01/28/11 12:39	
cis-1,2-Dichloroethene	ug/L	ND	5.0	01/28/11 12:39	
Ethylbenzene	ug/L	ND	5.0	01/28/11 12:39	
Methylene chloride	ug/L	ND	5.0	01/28/11 12:39	
Naphthalene	ug/L	ND	5.0	01/28/11 12:39	
Tetrachloroethene	ug/L	ND	5.0	01/28/11 12:39	
Toluene	ug/L	ND	5.0	01/28/11 12:39	
trans-1,2-Dichloroethene	ug/L	ND	5.0	01/28/11 12:39	
Trichloroethene	ug/L	ND	5.0	01/28/11 12:39	
Vinyl chloride	ug/L	ND	2.0	01/28/11 12:39	
Xylene (Total)	ug/L	ND	10.0	01/28/11 12:39	
4-Bromofluorobenzene (S)	%	97	70-126	01/28/11 12:39	
Dibromofluoromethane (S)	%	93	80-123	01/28/11 12:39	
Toluene-d8 (S)	%	100	80-116	01/28/11 12:39	

LABORATORY CONTROL SAMPLE: 533210

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.6	97	69-136	
1,1-Dichloroethane	ug/L	50	50.8	102	67-133	
1,1-Dichloroethene	ug/L	50	55.0	110	63-128	
1,2-Dichloroethane	ug/L	50	50.9	102	69-139	
Benzene	ug/L	50	52.7	105	78-127	
Carbon tetrachloride	ug/L	50	45.7	91	62-143	
Chloroform	ug/L	50	51.2	102	74-131	
cis-1,2-Dichloroethene	ug/L	50	53.8	108	74-128	
Ethylbenzene	ug/L	50	51.5	103	81-126	
Methylene chloride	ug/L	50	51.7	103	32-164	
Naphthalene	ug/L	50	52.7	105	61-135	
Tetrachloroethene	ug/L	50	48.9	98	60-119	
Toluene	ug/L	50	53.5	107	75-129	
trans-1,2-Dichloroethene	ug/L	50	51.8	104	71-126	
Trichloroethene	ug/L	50	53.2	106	74-130	
Vinyl chloride	ug/L	50	52.5	105	55-141	
Xylene (Total)	ug/L	150	149	100	76-132	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
 Pace Project No.: 5045269

LABORATORY CONTROL SAMPLE: 533210

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			104	70-126	
Dibromofluoromethane (S)	%			100	80-123	
Toluene-d8 (S)	%			100	80-116	

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## QUALITY CONTROL DATA

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

QC Batch:	WETA/5989	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	5045269003, 5045269005, 5045269006, 5045269007		

METHOD BLANK: 530908                                  Matrix: Water

Associated Lab Samples: 5045269003, 5045269005, 5045269006, 5045269007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/21/11 15:59	

LABORATORY CONTROL SAMPLE: 530909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	2	1.9	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 530910                                  530911

Parameter	Units	5045269003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Qual
Nitrogen, Nitrate	mg/L	ND	2	2	1.9	1.8	92	91	90-110	1	20	

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## **QUALITY CONTROL DATA**

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

QC Batch: WETA/5999 Analysis Method: ASTM D516-90,02  
QC Batch Method: ASTM D516-90,02 Analysis Description: ASTM D516-9002 Sulfate Water  
Associated Lab Samples: 5045269003, 5045269005, 5045269006, 5045269007

METHOD BLANK: 531545                                  Matrix: Water

Associated Lab Samples: 5045269003, 5045269005, 5045269006, 5045269007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	5.0	01/25/11 13:35	

LABORATORY CONTROL SAMPLE: 531546

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	20.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 531547 531548

Parameter	5045232003		MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result						
Sulfate	mg/L	83.2	100	100	187	192	104	108	90-110	2	20	

MATRIX SPIKE SAMPLE: 531549

Parameter	Units	5045269007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	82.0	100	188	106	90-110	



## QUALIFIERS

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

### ANALYTE QUALIFIERS

- 1d Benzene ND at an estimated RL of 5.6ug/L, based on the MDL. aa 1/27/11
- 2d Benzene ND at an estimated RL of 5ug/L, based on the MDL. aa 1/26/11
- 3d Due to the high concentration of vinyl chloride a lower dilution could not be analyzed. aa 1/26/11
- 4d Due to the high concentration of vinyl chloride a lower dilution could not be analyzed. aa 1/27/11
- 5d PCE ND at an estimated RL of 7.4ug/L, based on the MDL. aa 1/27/11
- 6d TCE ND at an estimated RL of 7ug/L, based on the MDL. aa 1/27/11
- L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

**QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: Michigan Plaza M01046  
Pace Project No.: 5045269

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5045269005	MMW-P-08	SM 2340B	ICP/6467		
5045269001	MMW-P-01	EPA 8260	MSV/29835		
5045269002	MMW-P-05	EPA 8260	MSV/29863		
5045269003	MMW-P-06	EPA 8260	MSV/29863		
5045269004	MMW-P-07	EPA 8260	MSV/29885		
5045269005	MMW-P-08	EPA 8260	MSV/29863		
5045269006	MMW-P-10S	EPA 8260	MSV/29885		
5045269007	MMW-P-10D	EPA 8260	MSV/29885		
5045269008	Dup2	EPA 8260	MSV/29922		
5045269009	Trip Blank	EPA 8260	MSV/29922		
5045269010	EQ Blank	EPA 8260	MSV/29922		
5045269003	MMW-P-06	EPA 353.2	WETA/5989		
5045269005	MMW-P-08	EPA 353.2	WETA/5989		
5045269006	MMW-P-10S	EPA 353.2	WETA/5989		
5045269007	MMW-P-10D	EPA 353.2	WETA/5989		
5045269003	MMW-P-06	ASTM D516-90,02	WETA/5999		
5045269005	MMW-P-08	ASTM D516-90,02	WETA/5999		
5045269006	MMW-P-10S	ASTM D516-90,02	WETA/5999		
5045269007	MMW-P-10D	ASTM D516-90,02	WETA/5999		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a **LEGAL DOCUMENT**. All relevant fields must be completed accurately.

# Sample Condition Upon Receipt



Client Name: Mundell

Project # 5045269

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_  
 Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other foam

Thermometer Used 1 2 3 4 6 A B C D E Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 0.2°C, 0.1°C Ice Visible in Sample Containers:  yes  no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 01/21/11 BS

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>Nitrates</u> <u>BS</u>
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
All containers needing preservation have been pH checked? exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
<b>Project Manager Review</b>		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.

**Client Notification/ Resolution:**

Field Data Required? Y / N

Person Contacted: Sarah Webb Date/Time: 01-21-11 via email

Comments/ Resolution:

DUPA should only get VOC, Add nitrate/sulfate to mmw-p-10s

Project Manager Review:

Date: 01-21-11

# Sample Container Count

CLIENT: Munro

COC PAGE 1 of 1  
COC ID# 1366007

Project # S0452609

Sample Line

Item	DG9H	AG1U	WG FU R	4 / 6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1	3												
2	3												
3	3												
4	3												
5	3												
6	3												
7	3												
8	3												
9	3												
10	3												
11													
12													

## Container Codes

DG9H	40mL HCl amber vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCl amber glass	BP1S	1 liter H <sub>2</sub> SO <sub>4</sub> plastic	DG9S	40mL H <sub>2</sub> SO <sub>4</sub> amber vial
WG FU	4oz clear soil jar	AG1S	1 liter H <sub>2</sub> SO <sub>4</sub> amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	J	Wipe/Swab
BP2U	500mL H <sub>2</sub> SO <sub>4</sub> amber glass	AG2S	500mL H <sub>2</sub> SO <sub>4</sub> amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H <sub>2</sub> SO <sub>4</sub> plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VGGH	40mL HCl clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCl clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H <sub>2</sub> SO <sub>4</sub> plastic	BG1S	1 liter H <sub>2</sub> SO <sub>4</sub> clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H <sub>2</sub> SO <sub>4</sub> glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCl
AG1S	1 liter H <sub>2</sub> SO <sub>4</sub> amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfite amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

February 28, 2011

Ms. Sarah Webb  
Mundell & Associates  
110 South Downey Ave.  
Indianapolis, IN 46219

RE: Project: Michigan Plaza  
Pace Project No.: 5045955

Dear Ms. Webb:

Enclosed are the analytical results for sample(s) received by the laboratory on February 22, 2011. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tina Sayer

tina.sayer@pacelabs.com  
Project Manager

Illinois/NELAC Certification #: 100418

Indiana Certification #: C-49-06

Kansas Certification #: E-10247

Kentucky Certification #: 0042

Louisiana Certification #: 04076

Ohio VAP: CL0065

Pennsylvania: 68-00791

West Virginia Certification #: 330

Enclosures

cc: Jelling Lai, Mundell & Associates

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: Michigan Plaza  
Pace Project No.: 5045955

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5045955001	MMW-P-04	Water	02/18/11 14:12	02/22/11 10:15
5045955002	Trip Blank	Water	02/18/11 08:00	02/22/11 10:15

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: Michigan Plaza  
Pace Project No.: 5045955

Lab ID	Sample ID	Method	Analysts	Analytics Reported
5045955001	MMW-P-04	EPA 8260	JLZ	20
5045955002	Trip Blank	EPA 8260	JLZ	20

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Michigan Plaza  
Pace Project No.: 5045955

Sample: MMW-P-04	Lab ID: 5045955001	Collected: 02/18/11 14:12	Received: 02/22/11 10:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND	ug/L	5.0	1		02/25/11 05:44	71-43-2	
Carbon tetrachloride	ND	ug/L	5.0	1		02/25/11 05:44	56-23-5	
Chloroform	ND	ug/L	5.0	1		02/25/11 05:44	67-66-3	
1,1-Dichloroethane	ND	ug/L	5.0	1		02/25/11 05:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1		02/25/11 05:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	1		02/25/11 05:44	75-35-4	
cis-1,2-Dichloroethene	<b>6.4</b>	ug/L	5.0	1		02/25/11 05:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	1		02/25/11 05:44	156-60-5	
Ethylbenzene	ND	ug/L	5.0	1		02/25/11 05:44	100-41-4	
Methylene chloride	ND	ug/L	5.0	1		02/25/11 05:44	75-09-2	
Naphthalene	ND	ug/L	5.0	1		02/25/11 05:44	91-20-3	
Tetrachloroethene	ND	ug/L	5.0	1		02/25/11 05:44	127-18-4	
Toluene	ND	ug/L	5.0	1		02/25/11 05:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	1		02/25/11 05:44	71-55-6	
Trichloroethene	ND	ug/L	5.0	1		02/25/11 05:44	79-01-6	
Vinyl chloride	<b>36.3</b>	ug/L	2.0	1		02/25/11 05:44	75-01-4	
Xylene (Total)	ND	ug/L	10.0	1		02/25/11 05:44	1330-20-7	
Dibromofluoromethane (S)	100 %		83-123	1		02/25/11 05:44	1868-53-7	
4-Bromofluorobenzene (S)	93 %		72-125	1		02/25/11 05:44	460-00-4	
Toluene-d8 (S)	102 %		81-114	1		02/25/11 05:44	2037-26-5	

Date: 02/28/2011 02:30 PM

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: Michigan Plaza  
Pace Project No.: 5045955

Sample: Trip Blank	Lab ID: 5045955002	Collected: 02/18/11 08:00	Received: 02/22/11 10:15	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>	Analytical Method: EPA 8260							
Benzene	ND ug/L		5.0	1		02/25/11 06:21	71-43-2	
Carbon tetrachloride	ND ug/L		5.0	1		02/25/11 06:21	56-23-5	
Chloroform	ND ug/L		5.0	1		02/25/11 06:21	67-66-3	
1,1-Dichloroethane	ND ug/L		5.0	1		02/25/11 06:21	75-34-3	
1,2-Dichloroethane	ND ug/L		5.0	1		02/25/11 06:21	107-06-2	
1,1-Dichloroethene	ND ug/L		5.0	1		02/25/11 06:21	75-35-4	
cis-1,2-Dichloroethene	ND ug/L		5.0	1		02/25/11 06:21	156-59-2	
trans-1,2-Dichloroethene	ND ug/L		5.0	1		02/25/11 06:21	156-60-5	
Ethylbenzene	ND ug/L		5.0	1		02/25/11 06:21	100-41-4	
Methylene chloride	ND ug/L		5.0	1		02/25/11 06:21	75-09-2	
Naphthalene	ND ug/L		5.0	1		02/25/11 06:21	91-20-3	
Tetrachloroethene	ND ug/L		5.0	1		02/25/11 06:21	127-18-4	
Toluene	ND ug/L		5.0	1		02/25/11 06:21	108-88-3	
1,1,1-Trichloroethane	ND ug/L		5.0	1		02/25/11 06:21	71-55-6	
Trichloroethene	ND ug/L		5.0	1		02/25/11 06:21	79-01-6	
Vinyl chloride	ND ug/L		2.0	1		02/25/11 06:21	75-01-4	
Xylene (Total)	ND ug/L		10.0	1		02/25/11 06:21	1330-20-7	
Dibromofluoromethane (S)	99 %		83-123	1		02/25/11 06:21	1868-53-7	
4-Bromofluorobenzene (S)	96 %		72-125	1		02/25/11 06:21	460-00-4	
Toluene-d8 (S)	104 %		81-114	1		02/25/11 06:21	2037-26-5	

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## REPORT OF LABORATORY ANALYSIS

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**QUALITY CONTROL DATA**

Project: Michigan Plaza  
Pace Project No.: 5045955

QC Batch: MSV/30366 Analysis Method: EPA 8260  
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV  
Associated Lab Samples: 5045955001, 5045955002

METHOD BLANK: 540734 Matrix: Water

Associated Lab Samples: 5045955001, 5045955002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	02/25/11 03:14	
1,1-Dichloroethane	ug/L	ND	5.0	02/25/11 03:14	
1,1-Dichloroethene	ug/L	ND	5.0	02/25/11 03:14	
1,2-Dichloroethane	ug/L	ND	5.0	02/25/11 03:14	
Benzene	ug/L	ND	5.0	02/25/11 03:14	
Carbon tetrachloride	ug/L	ND	5.0	02/25/11 03:14	
Chloroform	ug/L	ND	5.0	02/25/11 03:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	02/25/11 03:14	
Ethylbenzene	ug/L	ND	5.0	02/25/11 03:14	
Methylene chloride	ug/L	ND	5.0	02/25/11 03:14	
Naphthalene	ug/L	ND	5.0	02/25/11 03:14	
Tetrachloroethene	ug/L	ND	5.0	02/25/11 03:14	
Toluene	ug/L	ND	5.0	02/25/11 03:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	02/25/11 03:14	
Trichloroethene	ug/L	ND	5.0	02/25/11 03:14	
Vinyl chloride	ug/L	ND	2.0	02/25/11 03:14	
Xylene (Total)	ug/L	ND	10.0	02/25/11 03:14	
4-Bromofluorobenzene (S)	%	93	72-125	02/25/11 03:14	
Dibromofluoromethane (S)	%	100	83-123	02/25/11 03:14	
Toluene-d8 (S)	%	104	81-114	02/25/11 03:14	

LABORATORY CONTROL SAMPLE: 540735

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	42.2	84	69-126	
1,1-Dichloroethane	ug/L	50	44.4	89	70-127	
1,1-Dichloroethene	ug/L	50	46.0	92	75-145	
1,2-Dichloroethane	ug/L	50	44.1	88	71-127	
Benzene	ug/L	50	46.1	92	76-123	
Carbon tetrachloride	ug/L	50	41.2	82	65-125	
Chloroform	ug/L	50	44.7	89	73-122	
cis-1,2-Dichloroethene	ug/L	50	47.0	94	79-129	
Ethylbenzene	ug/L	50	44.4	89	75-120	
Methylene chloride	ug/L	50	43.2	86	61-138	
Naphthalene	ug/L	50	48.4	97	62-130	
Tetrachloroethene	ug/L	50	43.8	88	57-125	
Toluene	ug/L	50	48.4	97	72-124	
trans-1,2-Dichloroethene	ug/L	50	45.7	91	71-145	
Trichloroethene	ug/L	50	47.2	94	77-122	
Vinyl chloride	ug/L	50	49.1	98	61-146	
Xylene (Total)	ug/L	150	128	85	72-126	

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## QUALITY CONTROL DATA

Project: Michigan Plaza  
Pace Project No.: 5045955

LABORATORY CONTROL SAMPLE: 540735

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Bromofluorobenzene (S)	%			97	72-125	
Dibromofluoromethane (S)	%			94	83-123	
Toluene-d8 (S)	%			101	81-114	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 540736 540737

Parameter	Units	5045986001		MSD		MS Result	MS % Rec	MSD % Rec	% Rec Limits	Max	
		Spiked Conc.	Result	Spiked Conc.	Result					RPD	RPD
1,1,1-Trichloroethane	ug/L	ND	50	50	39.3	42.0	79	84	37-136	7	20
1,1-Dichloroethane	ug/L	ND	50	50	43.6	44.8	87	90	47-138	3	20
1,1-Dichloroethene	ug/L	ND	50	50	43.1	45.8	86	92	54-152	6	20
1,2-Dichloroethane	ug/L	ND	50	50	43.2	47.0	86	94	42-139	8	20
Benzene	ug/L	ND	50	50	42.0	43.5	84	87	52-134	4	20
Carbon tetrachloride	ug/L	ND	50	50	36.6	38.1	73	76	26-136	4	20
Chloroform	ug/L	ND	50	50	42.2	45.1	84	90	50-134	7	20
cis-1,2-Dichloroethene	ug/L	ND	50	50	43.8	46.7	88	93	48-145	6	20
Ethylbenzene	ug/L	ND	50	50	26.9	28.1	54	56	29-132	4	20
Methylene chloride	ug/L	ND	50	50	40.9	43.1	82	86	47-141	5	20
Naphthalene	ug/L	ND	50	50	34.8	36.4	70	73	40-124	4	20
Tetrachloroethene	ug/L	ND	50	50	27.4	28.0	55	56	30-124	2	20
Toluene	ug/L	ND	50	50	34.1	35.9	68	72	42-130	5	20
trans-1,2-Dichloroethene	ug/L	ND	50	50	41.3	41.9	83	84	48-144	1	20
Trichloroethene	ug/L	ND	50	50	36.0	37.9	72	76	44-130	5	20
Vinyl chloride	ug/L	ND	50	50	50.6	53.7	101	107	45-159	6	20
Xylene (Total)	ug/L	ND	150	150	76.5	77.2	51	51	29-131	.9	20
4-Bromofluorobenzene (S)	%						98	99	72-125		20
Dibromofluoromethane (S)	%						98	99	83-123		20
Toluene-d8 (S)	%						102	101	81-114		20

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## QUALIFIERS

Project: Michigan Plaza  
Pace Project No.: 5045955

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Michigan Plaza  
 Pace Project No.: 5045955

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
5045955001	MMW-P-04	EPA 8260	MSV/30366		
5045955002	Trip Blank	EPA 8260	MSV/30366		

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# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		Section D Sample Details:		Section E Analysis Requests:		Section F Comments:																																																																																																																																																																																																																																																																																																																																									
Company: <b>Mundell &amp; Associates</b>	Address: <b>110 S. Dearborn</b>	Report To: <b>Sarah Webb</b>	Copy To:	Attention: <b>Mark Tabb</b>	Company Name: <b>Mundell</b>	Address:	REGULATORY AGENCY	<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER	<input type="checkbox"/> DRINKING WATER	<input type="checkbox"/> OTHER																																																																																																																																																																																																																																																																																																																																								
Telephone: <b>317-632-9660</b>	Email To: <b>46219</b>	Purchase Order No.:	Project Name: <b>Michigan Dose</b>	Pace Quote Reference:	Pace Project Manager:	Pace Profile #:	Site Location STATE:	<input type="checkbox"/> UST	<input type="checkbox"/> RCRA																																																																																																																																																																																																																																																																																																																																										
Requested Due Date/TAT: <b>5/4/05</b>	Phone: <b>317-632-9665</b>	Project Number: <b>M01046</b>					Residual Chlorine (Y/N)																																																																																																																																																																																																																																																																																																																																												
<table border="1"> <thead> <tr> <th colspan="12">Requested Analysis Filtered (Y/N)</th> </tr> <tr> <th colspan="2">Section D</th> <th colspan="2">Matrix Codes</th> <th colspan="2">COLLECTED</th> <th colspan="2">Preservatives</th> <th colspan="2"># OF CONTAINERS</th> <th colspan="2">SAMPLE TEMP AT COLLECTION</th> </tr> <tr> <th colspan="2">Required Client Information</th> <th colspan="2">MATRIX / CODE</th> <th colspan="2">COMPOSITE START</th> <th colspan="2">COMPOSITE END/GRAB</th> <th colspan="2"></th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td colspan="2">SAMPLE ID (A-Z, 0-9 /,-)</td> <td colspan="2">MATERIAL CODE (see valid codes to left)</td> <td colspan="2">WATER</td> <td colspan="2">WATER</td> <td colspan="2">1</td> <td colspan="2">30°C</td> </tr> <tr> <td colspan="2"># ITEM</td> <td colspan="2">Sample IDs MUST BE UNIQUE</td> <td colspan="2">WATER</td> <td colspan="2">WATER</td> <td colspan="2">3</td> <td colspan="2">30°C</td> </tr> <tr> <td colspan="2">1 M01046-004</td> <td colspan="2">TRIP BLANK</td> <td colspan="2">WATER</td> <td colspan="2">WATER</td> <td colspan="2">3</td> <td colspan="2">30°C</td> </tr> <tr> <td colspan="2">2</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">3</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">4</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">5</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">6</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> </tr> <tr> <td colspan="2">7</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td 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AFFILIATION</th> <th colspan="2">DATE</th> <th colspan="2">TIME</th> <th colspan="2">SAMPLE CONDITIONS</th> </tr> </thead> <tbody> <tr> <td colspan="2"><b>N.D.</b></td> <td colspan="2">2/21/05</td> <td colspan="2">11:05</td> <td colspan="2"><b>Zahn Tech</b></td> <td colspan="2">2/21/05</td> <td colspan="2">10:15</td> <td colspan="2">30°C Y N Y</td> </tr> </tbody> </table> </td> </tr> <tr> <td colspan="12"> <table border="1"> <thead> <tr> <th colspan="12">SAMPLER NAME AND SIGNATURE</th> </tr> <tr> <th colspan="6">PRINT Name of SAMPLER: <b>Andrea</b></th> <th colspan="6">SIGNATURE of SAMPLER: <b>Andrea</b></th> </tr> </thead> <tbody> <tr> <td colspan="12"> <input checked="" type="checkbox"/> ORIGINAL            Pace Time: <b>11:05 2/21/05</b> </td> </tr> </tbody> </table> </td> </tr> <tr> <td colspan="12">         Received on <b>C</b>          Temp in <b>°C</b>          Custody Sealed Container (VIN)          Samples intact (Y/N)       </td> </tr> <tr> <td colspan="12">         F-ALL-Q-020rev.07, 15-May-2007       </td> </tr> </tbody></table>												Requested Analysis Filtered (Y/N)												Section D		Matrix Codes		COLLECTED		Preservatives		# OF CONTAINERS		SAMPLE TEMP AT COLLECTION		Required Client Information		MATRIX / CODE		COMPOSITE START		COMPOSITE END/GRAB						SAMPLE ID (A-Z, 0-9 /,-)		MATERIAL CODE (see valid codes to left)		WATER		WATER		1		30°C		# ITEM		Sample IDs MUST BE UNIQUE		WATER		WATER		3		30°C		1 M01046-004		TRIP BLANK		WATER		WATER		3		30°C		2												3												4												5												6												7												8												9												10												11												12												<table border="1"> <thead> <tr> <th colspan="12">ADDITIONAL COMMENTS</th> </tr> <tr> <th colspan="2">RELINQUISHED BY / AFFILIATION</th> <th colspan="2">DATE</th> <th colspan="2">TIME</th> <th colspan="2">ACCEPTED BY / AFFILIATION</th> <th colspan="2">DATE</th> <th colspan="2">TIME</th> <th colspan="2">SAMPLE CONDITIONS</th> </tr> </thead> <tbody> <tr> 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SAMPLE ID (A-Z, 0-9 /,-)		MATERIAL CODE (see valid codes to left)		WATER		WATER		1		30°C																																																																																																																																																																																																																																																																																																																																									
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Received on <b>C</b> Temp in <b>°C</b> Custody Sealed Container (VIN) Samples intact (Y/N)																																																																																																																																																																																																																																																																																																																																																			
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\*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

# Sample Condition Upon Receipt



Client Name: Mundell & Assoc. Project # 5045955

Courier:  Fed Ex  UPS  USPS  Client  Commercial  Pace Other \_\_\_\_\_  
 Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present:  yes  no Seals intact:  yes  no

Packing Material:  Bubble Wrap  Bubble Bags  None  Other \_\_\_\_\_

Thermometer Used 1 2 3 4 6 A B C D E Type of Ice: Wet Blue None  Samples on ice, cooling process has begun

Cooler Temperature 2.9°C Ice Visible in Sample Containers:  yes  no

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 2/22/11 21

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	5.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	6.
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8. <u>Wafer</u>
All containers needing preservation have been pH checked? exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	

Project Manager Review		
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sufficient Volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review:	<u>J. Day</u>
-------------------------	---------------

Date: 2/22/11

# Sample Container Count

CLIENT: Monell & Appor.

COC PAGE 1 of 1  
COC ID# 136667

Project # 245A55



Sample Line

Item	DG9H	AG1U	WG FU	R 4 / 6	BP2N	BP2U	BP3N	BP3U	BP3S	AG3S	AG1H	Comments
1	3											
2	3											
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

## Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WG FU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved <b>amber</b> vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOH, Asc Acid plastic	VGGH	40mL HCl clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio, clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved <b>clear</b> vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassette	VSG	Headspace septa vial & HCl
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag



Microseeps, Inc  
220 William Pitt Way  
Pittsburgh, PA 15238  
Phone: (412) 826-5245  
Fax: (412) 826-3433

April 21, 2011

Sarah Webb  
Mundell & Associates Inc.  
110 South Downey Ave.  
Indianapolis, IN 46219

RE: M01046 MICHIGAN PLAZA

Microseeps Workorder: 1144

Dear Sarah Webb:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, April 11, 2011. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

*Heather Hauser* (R) 4/21/11

Heather Hauser 04/21/2011  
hhauser@microseeps.com

Enclosures

Total Number of Pages 6

Report ID: 1144 - 47322

Page 1 of 5

#### CERTIFICATE OF ANALYSIS

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Microseeps, Inc  
220 William Pitt Way  
Pittsburgh, PA 15238  
Phone: (412) 826-5245  
Fax: (412) 826-3433

## LABORATORY ACCREDITATIONS & CERTIFICATIONS

<b>Accreditor:</b>	Pennsylvania Department of Environmental Protection, Bureau of Laboratories	
<b>Accreditation ID:</b>	02-00538	
<b>Scope:</b>	NELAP Non-Potable Water and Solid & Hazardous Waste	
<b>Accreditor:</b>	NELAP: State of Florida, Department of Health, Bureau of Laboratories	
<b>Accreditation ID:</b>	E87832	
<b>Scope:</b>	Clean Water Act (CWA)	Resource Conservation and Recovery Act (RCRA)
<b>Accreditor:</b>	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification	
<b>Accreditation ID:</b>	89009003	
<b>Scope:</b>	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)	
<b>Accreditor:</b>	NELAP: State of Louisiana, Department of Environmental Quality	
<b>Accreditation ID:</b>	04104	
<b>Scope:</b>	Solid and Chemical Materials; Non-Potable Water	
<b>Accreditor:</b>	NELAP: New Jersey, Department of Environmental Protection	
<b>Accreditation ID:</b>	PA026	
<b>Scope:</b>	Non-Potable Water; Solid and Chemical Materials	
<b>Accreditor:</b>	NELAP: New York, Department of Health Wadsworth Center	
<b>Accreditation ID:</b>	11815	
<b>Scope:</b>	Non-Potable Water; Solid and Hazardous Waste	
<b>Accreditor:</b>	State of Connecticut, Department of Public Health, Division of Environmental Health	
<b>Accreditation ID:</b>	PH-0263	
<b>Scope:</b>	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)	
<b>Accreditor:</b>	NELAP: Texas, Commission on Environmental Quality	
<b>Accreditation ID:</b>	T104704453-09-TX	
<b>Scope:</b>	Non-Potable Water	
<b>Accreditor:</b>	State of New Hampshire	
<b>Accreditation ID:</b>	299409	
<b>Scope:</b>	Non-potable water	
<b>Accreditor:</b>	State of Georgia	
<b>Accreditation ID:</b>	Chapter 391-3-26	
<b>Scope:</b>	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, Microseeps is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).	

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Pittsburgh, PA 15238  
Phone: (412) 826-5245  
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## SAMPLE SUMMARY

Workorder: 1144 M01046 MICHIGAN PLAZA

Lab ID	Sample ID	Matrix	Date Collected	Date Received
11440001	B-3	Vapor	4/8/2011 11:20	4/11/2011 13:53

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Pittsburgh, PA 15238  
Phone: (412) 826-5245  
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## ANALYTICAL RESULTS

Workorder: 1144 M01046 MICHIGAN PLAZA

Lab ID: 11440001 Date Received: 4/11/2011 13:53 Matrix: Vapor  
Sample ID: B-3 Date Collected: 4/8/2011 11:20

Parameters	Results	Units	RDL	MDL	DF	Prepared	By	Analyzed	By	Qual	RegLmt
------------	---------	-------	-----	-----	----	----------	----	----------	----	------	--------

### RISK

Analysis Desc:	AM4.02 Vapors	Analytical Method: AM4.02 Vapors								
Vinyl Chloride	<1.0	ppmv	1.0	0.095	1			4/13/2011 15:17	SL	
1,1-Dichloroethene	<0.010	ppmv	0.010	0.0010	1			4/13/2011 15:17	SL	
trans-1,2-Dichloroethene	<0.010	ppmv	0.010	0.0080	1			4/13/2011 15:17	SL	
Methylene Chloride	<2.0	ppmv	2.0	0.19	1			4/13/2011 15:17	SL	
1,1-Dichloroethane	<0.020	ppmv	0.020	0.0040	1			4/13/2011 15:17	SL	
cis-1,2-Dichloroethene	0.050	ppmv	0.020	0.0070	1			4/13/2011 15:17	SL	
Chloroform	<0.0050	ppmv	0.0050	0.0010	1			4/13/2011 15:17	SL	
1,1,1-Trichloroethane	<0.0050	ppmv	0.0050	0.0010	1			4/13/2011 15:17	SL	
Carbon Tetrachloride	<0.0050	ppmv	0.0050	0.0010	1			4/13/2011 15:17	SL	
Trichloroethene	<0.010	ppmv	0.010	0.0010	1			4/13/2011 15:17	SL	
Tetrachloroethene	0.21	ppmv	0.010	0.0010	1			4/13/2011 15:17	SL	

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## ANALYTICAL RESULTS QUALIFIERS

Workorder: 1144 M01046 MICHIGAN PLAZA

---

### PARAMETER QUALIFIERS

- U      Indicates the compound was analyzed for, but not detected.
- J      Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (RDL).

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Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

Page: Page 1 of 8  
Lab Proj #: P1101265  
Report Date: 01/28/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

## Laboratory Results

Total pages in data package: 9

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1101265-01	B-1
P1101265-02	B-2
P1101265-03	B-4
P1101265-04	B-5
P1101265-05	B-6
P1101265-06	B-7

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo Date: 1-31-11

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.  
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative:

Client Name: Mundell & Associates  
 Contact: Sarah Webb  
 Address: 110 South Downey Avenue  
 Indianapolis, IN 46219

Page: Page 2 of 8  
 Lab Proj #: P1101265  
 Report Date: 01/28/11  
 Client Proj Name: Michigan Plaza  
 Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	Lab Sample #			<u>Sampled Date/Time</u>	<u>Received</u>	
B-1	Vapor	P1101265-01			21 Jan. 11 12:10	25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>RiskAnalysis</b>							
N 1,1,1-Trichloroethane	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethane	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Carbon Tetrachloride	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N Chloroform	J	0.0036	0.0050	PPMV	AM4.02	1/27/11	mm
N cis-1,2-Dichloroethene	J	0.0130	0.0200	PPMV	AM4.02	1/27/11	mm
N Methylene Chloride	U	< 2.0000	2.0000	PPMV	AM4.02	1/27/11	mm
N Tetrachloroethene		0.1400	0.0100	PPMV	AM4.02	1/27/11	mm
N trans-1,2-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Trichloroethene	J	0.0021	0.0100	PPMV	AM4.02	1/27/11	mm
N Vinyl Chloride	J	0.0420	1.0000	PPMV	AM4.02	1/27/11	mm



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

Page: Page 3 of 8  
Lab Proj #: P1101265  
Report Date: 01/28/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	Lab Sample #			<u>Sampled Date/Time</u>	<u>Received</u>	
B-2	Vapor	P1101265-02			21 Jan. 11 12:30	25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>RiskAnalysis</b>							
N 1,1,1-Trichloroethane	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethane	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Carbon Tetrachloride	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N Chloroform	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N cis-1,2-Dichloroethene	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N Methylene Chloride	U	< 2.0000	2.0000	PPMV	AM4.02	1/27/11	mm
N Tetrachloroethene		0.0270	0.0100	PPMV	AM4.02	1/27/11	mm
N trans-1,2-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Trichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Vinyl Chloride	J	0.0460	1.0000	PPMV	AM4.02	1/27/11	mm



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

Page: Page 4 of 8  
Lab Proj #: P1101265  
Report Date: 01/28/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	Lab Sample #			<u>Sampled Date/Time</u>	<u>Received</u>	
B-4	Vapor	P1101265-03			21 Jan. 11 12:05	25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>RiskAnalysis</b>							
N 1,1,1-Trichloroethane	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethane	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Carbon Tetrachloride	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N Chloroform	J	0.0025	0.0050	PPMV	AM4.02	1/27/11	mm
N cis-1,2-Dichloroethene	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N Methylene Chloride	U	< 2.0000	2.0000	PPMV	AM4.02	1/27/11	mm
N Tetrachloroethene	J	0.0065	0.0100	PPMV	AM4.02	1/27/11	mm
N trans-1,2-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Trichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Vinyl Chloride	U	< 1.0000	1.0000	PPMV	AM4.02	1/27/11	mm



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101265  
Report Date: 01/28/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	Lab Sample #			<u>Sampled Date/Time</u>	<u>Received</u>	
B-5	Vapor	P1101265-04			21 Jan. 11 11:25	25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>RiskAnalysis</b>							
N 1,1,1-Trichloroethane	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethane	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Carbon Tetrachloride	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N Chloroform	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N cis-1,2-Dichloroethene	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N Methylene Chloride	U	< 2.0000	2.0000	PPMV	AM4.02	1/27/11	mm
N Tetrachloroethene		0.0330	0.0100	PPMV	AM4.02	1/27/11	mm
N trans-1,2-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Trichloroethene	J	0.0019	0.0100	PPMV	AM4.02	1/27/11	mm
N Vinyl Chloride	U	< 1.0000	1.0000	PPMV	AM4.02	1/27/11	mm



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101265  
Report Date: 01/28/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
B-6	Vapor	P1101265-05		21 Jan. 11 11:35		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>RiskAnalysis</b>							
N 1,1,1-Trichloroethane	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethane	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Carbon Tetrachloride	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N Chloroform	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N cis-1,2-Dichloroethene	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N Methylene Chloride	U	< 2.0000	2.0000	PPMV	AM4.02	1/27/11	mm
N Tetrachloroethene		0.0490	0.0100	PPMV	AM4.02	1/27/11	mm
N trans-1,2-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Trichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Vinyl Chloride	U	< 1.0000	1.0000	PPMV	AM4.02	1/27/11	mm



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101265  
Report Date: 01/28/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
B-7	Vapor	P1101265-06		21 Jan. 11 11:45		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>RiskAnalysis</b>							
N 1,1,1-Trichloroethane	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethane	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N 1,1-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Carbon Tetrachloride	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N Chloroform	U	< 0.0050	0.0050	PPMV	AM4.02	1/27/11	mm
N cis-1,2-Dichloroethene	U	< 0.0200	0.0200	PPMV	AM4.02	1/27/11	mm
N Methylene Chloride	U	< 2.0000	2.0000	PPMV	AM4.02	1/27/11	mm
N Tetrachloroethene	J	0.0014	0.0100	PPMV	AM4.02	1/27/11	mm
N trans-1,2-Dichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Trichloroethene	U	< 0.0100	0.0100	PPMV	AM4.02	1/27/11	mm
N Vinyl Chloride	U	< 1.0000	1.0000	PPMV	AM4.02	1/27/11	mm



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
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 Address: 110 South Downey Avenue  
 Indianapolis, IN 46219

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 Lab Proj #: P1101265  
 Report Date: 01/28/11  
 Client Proj Name: Michigan Plaza  
 Client Proj #: M01046

**Prep Method:** Volatiles in Vapor by GC/FID/ECD  
**Analysis Method:** Volatiles in Vapor by GC/FID/ECD

#### M110126016-MB

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Vinyl Chloride	< 1.0000 PPMV		1.0000		- NA
Methylene Chloride	< 2.0000 PPMV		2.0000		- NA
cis-1,2-Dichloroethene	< 0.0200 PPMV		0.0200		- NA
Trichloroethene	< 0.0100 PPMV		0.0100		- NA
Tetrachloroethene	< 0.0100 PPMV		0.0100		- NA
trans-1,2-Dichloroethene	< 0.0100 PPMV		0.0100		- NA
1,1,1-Trichloroethane	< 0.0050 PPMV		0.0050		- NA
Chloroform	< 0.0050 PPMV		0.0050		- NA
Carbon Tetrachloride	< 0.0050 PPMV		0.0050		- NA
1,1-Dichloroethene	< 0.0100 PPMV		0.0100		- NA
1,1-Dichloroethane	< 0.0200 PPMV		0.0200		- NA

#### M110126016-LCS

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Trichloroethene	0.4720 PPMV	0.48	98.00	75 - 125
trans-1,2-Dichloroethene	0.6407 PPMV	0.65	99.00	75 - 125
1,1,1-Trichloroethane	0.4793 PPMV	0.47	102.00	75 - 125
Chloroform	0.5248 PPMV	0.53	99.00	75 - 125
Carbon Tetrachloride	0.4140 PPMV	0.41	101.00	75 - 125
1,1-Dichloroethene	0.6139 PPMV	0.65	94.00	75 - 125
1,1-Dichloroethane	0.5596 PPMV	0.64	87.00	75 - 125

#### M110126016-LCSD

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Trichloroethene	0.4661 PPMV	0.48	97.00	75 - 125	1.26	0 - 20
trans-1,2-Dichloroethene	0.6410 PPMV	0.65	99.00	75 - 125	0.05	0 - 20
1,1,1-Trichloroethane	0.4727 PPMV	0.47	101.00	75 - 125	1.39	0 - 20
Chloroform	0.5169 PPMV	0.53	98.00	75 - 125	1.52	0 - 20
Carbon Tetrachloride	0.4079 PPMV	0.41	99.00	75 - 125	1.48	0 - 20
1,1-Dichloroethene	0.6096 PPMV	0.65	94.00	75 - 125	0.70	0 - 20
1,1-Dichloroethane	0.5569 PPMV	0.64	87.00	75 - 125	0.48	0 - 20

Outlined Results indicate results outside of Control limits

Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis





Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

## Laboratory Results

Total pages in data package: 19

<u>Lab Sample #</u>	<u>Client Sample ID</u>
P1101262-01	MMW-1S
P1101262-02	MMW-9S
P1101262-03	MMW-9S MS
P1101262-04	MMW-9S MSD
P1101262-05	MMW-11S
P1101262-06	MMW-P-03S
P1101262-07	MMW-P-03D
P1101262-08	MMW-P-06
P1101262-09	MMW-P-08
P1101262-10	MMW-P-09S
P1101262-11	MMW-P-10S
P1101262-12	MMW-P-10D
P1101262-13	MMW-C-02
P1101262-14	DUP

Microseeps test results meet all the requirements of the NELAC standards or provide reasons and/or justification if they do not.

Approved By: Debbie Hallo (RZ) Date: 2/3/11

Project Manager: Debbie Hallo

The analytical results reported here are reliable and usable to the precision expressed in this report. As required by some regulating authorities, a full discussion of the uncertainty in our analytical results can be obtained at our web site or through customer service. Unless otherwise specified, all results are reported on a wet weight basis.

*As a valued client we would appreciate your comments on our service.  
Please call customer service at (412)826-5245 or email customerservice@microseeps.com.*

Case Narrative: Lactic acid was detected in the blank at a concentration above the reporting limit.

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-1S	Water	P1101262-01		19 Jan. 11 10:51		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatile</b>							
N Acetic Acid	J	0.067	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-9S	Water	P1101262-02		19 Jan. 11 13:08		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid	J	0.042	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	B	0.210	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-9S MS	Water	P1101262-03		19 Jan. 11 13:08		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid		1.900	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid		1.800	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid		1.900	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid		1.800	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid		1.700	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	B	2.200	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid		1.800	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid		1.900	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid		1.800	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-9S MSD	Water	P1101262-04		19 Jan. 11 13:08		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid		1.900	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid		1.800	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid		2.300	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid		1.800	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid		1.700	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	B	2.200	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid		1.900	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid		1.900	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid		1.800	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
 Contact: Sarah Webb  
 Address: 110 South Downey Avenue  
 Indianapolis, IN 46219

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 Lab Proj #: P1101262  
 Report Date: 02/03/11  
 Client Proj Name: Michigan Plaza  
 Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>			<u>Sampled Date/Time</u>	<u>Received</u>	
MMW-11S	Water	P1101262-05			19 Jan. 11 9:17	25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatile</b>							
N Acetic Acid	J	0.033	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

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Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-P-03S	Water	P1101262-06		19 Jan. 11 11:25		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid	J	0.054	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-P-03D	Water	P1101262-07		19 Jan. 11 11:54		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid		0.600	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb

Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

Page: Page 9 of 18  
Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-P-06	Water	P1101262-08		20 Jan. 11 15:17		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatile</b>							
N Acetic Acid	J	0.051	0.070	mg/L	AM23G	1/27/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
 Contact: Sarah Webb  
 Address: 110 South Downey Avenue  
 Indianapolis, IN 46219

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 Lab Proj #: P1101262  
 Report Date: 02/03/11  
 Client Proj Name: Michigan Plaza  
 Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>	<u>Received</u>		
MMW-P-08	Water	P1101262-09		20 Jan. 11 14:32	25 Jan. 11 11:59		
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid		19.000	0.700	mg/L	AM23G	1/29/11	kb
N Butyric Acid		0.270	0.050	mg/L	AM23G	1/27/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/27/11	kb
N i-Pentanoic Acid	J	0.110	0.150	mg/L	AM23G	1/27/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/27/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/27/11	kb
N Propionic Acid		2.100	0.500	mg/L	AM23G	1/29/11	kb
N Pyruvic Acid	J	0.110	0.150	mg/L	AM23G	1/27/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	Lab Sample #			<u>Sampled Date/Time</u>	<u>Received</u>	
MMW-P-09S	Water	P1101262-10			19 Jan. 11 13:46	25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid	J	0.057	0.070	mg/L	AM23G	1/28/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/28/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/28/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-P-10S	Water	P1101262-11		20 Jan. 11 12:25		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid		4.700	0.070	mg/L	AM23G	1/28/11	kb
N Butyric Acid		0.150	0.050	mg/L	AM23G	1/28/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/28/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/28/11	kb
N Propionic Acid		0.260	0.050	mg/L	AM23G	1/28/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-P-10D	Water	P1101262-12		20 Jan. 11 13:02		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid		0.072	0.070	mg/L	AM23G	1/28/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/28/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/28/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

PA02-00538

MICROSEEPS

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

<u>Sample Description</u>	<u>Matrix</u>	<u>Lab Sample #</u>		<u>Sampled Date/Time</u>		<u>Received</u>	
MMW-C-02	Water	P1101262-13		19 Jan. 11 14:56		25 Jan. 11 11:59	
<u>Analyte(s)</u>	<u>Flag</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Method #</u>	<u>Analysis Date</u>	<u>By</u>
<b>SemiVolatiles</b>							
N Acetic Acid	J	0.039	0.070	mg/L	AM23G	1/28/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/28/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/28/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

Sample Description DUP	Matrix Water	Lab Sample #		Sampled Date/Time		Received	
		P1101262-14		19 Jan. 11	0:00	25 Jan. 11	11:59
Analyte(s)	Flag	Result	PQL	Units	Method #	Analysis Date	By
<b>SemiVolatile</b>							
N Acetic Acid	J	0.054	0.070	mg/L	AM23G	1/28/11	kb
N Butyric Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Hexanoic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N i-Pentanoic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb
N Lactic Acid	UB	< 0.100	0.100	mg/L	AM23G	1/28/11	kb
N Pentanoic Acid	U	< 0.070	0.070	mg/L	AM23G	1/28/11	kb
N Propionic Acid	U	< 0.050	0.050	mg/L	AM23G	1/28/11	kb
N Pyruvic Acid	U	< 0.150	0.150	mg/L	AM23G	1/28/11	kb



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

**Prep Method:** Volatile Fatty Acids by Ion Chromatography  
**Analysis Method:** Volatile Fatty Acids by Ion Chromatography

**M110127014-MB**

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Acetic Acid	< 0.070 mg/L	0.070		-	NA
Propionic Acid	< 0.050 mg/L	0.050		-	NA
Butyric Acid	< 0.050 mg/L	0.050		-	NA
Lactic Acid	0.210 mg/L	0.100		-	NA
Pyruvic Acid	< 0.150 mg/L	0.150		-	NA
i-Pentanoic Acid	< 0.150 mg/L	0.150		-	NA
Pentanoic Acid	< 0.070 mg/L	0.070		-	NA
i-Hexanoic Acid	< 0.050 mg/L	0.050		-	NA
Hexanoic Acid	< 0.050 mg/L	0.050		-	NA

**M110127014-LCS**

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Acetic Acid	1.900 mg/L	2.00	95.00	70 - 130
Propionic Acid	1.900 mg/L	2.00	95.00	70 - 130
Butyric Acid	1.800 mg/L	2.00	90.00	70 - 130
Lactic Acid	1.900 mg/L	2.00	95.00	70 - 130
Pyruvic Acid	1.800 mg/L	2.00	90.00	70 - 130
i-Pentanoic Acid	1.700 mg/L	2.00	85.00	70 - 130
Pentanoic Acid	1.800 mg/L	2.00	90.00	70 - 130
i-Hexanoic Acid	1.800 mg/L	2.00	90.00	70 - 130
Hexanoic Acid	1.700 mg/L	2.00	85.00	70 - 130

**P1101262-02A-MS**

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Acetic Acid	1.900 mg/L	2.00	93.00	70 - 130
Propionic Acid	1.900 mg/L	2.00	95.00	70 - 130
Butyric Acid	1.800 mg/L	2.00	90.00	70 - 130
Lactic Acid	2.200 mg/L	2.00	100.00	70 - 130
Pyruvic Acid	1.800 mg/L	2.00	90.00	70 - 130
i-Pentanoic Acid	1.700 mg/L	2.00	85.00	70 - 130
Pentanoic Acid	1.800 mg/L	2.00	90.00	70 - 130
i-Hexanoic Acid	1.800 mg/L	2.00	90.00	70 - 130



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

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Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

P1101262-02A-MS

	<u>Result</u>		<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Hexanoic Acid	1.900	mg/L	2.00	95.00	70 - 130

P1101262-02A-MSD

	<u>Result</u>		<u>TrueSpikeConc.</u>	<u>%Recovery</u>	<u>Ctl Limits</u>	<u>RPD</u>	<u>RPD Ctl Limits</u>
Acetic Acid	1.900	mg/L	2.00	93.00	70 - 130	0.00	0 - 30
Propionic Acid	1.900	mg/L	2.00	95.00	70 - 130	0.00	0 - 30
Butyric Acid	1.800	mg/L	2.00	90.00	70 - 130	0.00	0 - 30
Lactic Acid	2.200	mg/L	2.00	100.00	70 - 130	0.00	0 - 30
Pyruvic Acid	1.800	mg/L	2.00	90.00	70 - 130	0.00	0 - 30
i-Pentanoic Acid	1.700	mg/L	2.00	85.00	70 - 130	0.00	0 - 30
Pentanoic Acid	1.900	mg/L	2.00	95.00	70 - 130	5.41	0 - 30
i-Hexanoic Acid	1.800	mg/L	2.00	90.00	70 - 130	0.00	0 - 30
Hexanoic Acid	2.300	mg/L	2.00	115.00	70 - 130	19.05	0 - 30



Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis

Client Name: Mundell & Associates  
Contact: Sarah Webb  
Address: 110 South Downey Avenue  
Indianapolis, IN 46219

Page: Page 18 of 18  
Lab Proj #: P1101262  
Report Date: 02/03/11  
Client Proj Name: Michigan Plaza  
Client Proj #: M01046

**Prep Method:** Volatile Fatty Acids by Ion Chromatography  
**Analysis Method:** Volatile Fatty Acids by Ion Chromatography

**M110131054-MB**

	<u>Result</u>	<u>TrueSpikeConc.</u>	<u>RDL</u>	<u>%Recovery</u>	<u>Ctl Limits</u>
Acetic Acid	< 0.070 mg/L		0.070		- NA
Propionic Acid	< 0.050 mg/L		0.050		- NA

**M110131054-LCS**

	<u>Result</u>	<u>TrueSpikeConc.</u>		<u>%Recovery</u>	<u>Ctl Limits</u>
Acetic Acid	1.900 mg/L	2.00		95.00	70 - 130
Propionic Acid	1.900 mg/L	2.00		95.00	70 - 130



Outlined Results indicate results outside of Control limits

Data Qualifiers: J - estimated value, U - Non detect, R - Poor surrogate recovery, M - Recovery/RPD poor for MS/MSD, SAMP/DUP, B - detected in blank, S - field sample as received did not meet NELAC sample acceptance criteria, L - Subcontracted Lab used, N - NELAC certified analysis



Microseeps  
Lab. Proj. #

Phone: (412) 826-5245

Microseeps  
COC cont. #

Microseeps, Inc. - 220 William Pitt Way - Pittsburgh, PA 15233

Fax No: (412) 826-3433

# PROT 67 CHAIN OF CUSTODY RECORD

Mundell & Associates

16 S. Orange Ave, Suite 400, Philadelphia, PA, 19102

Phone #: 317-635-9060 Fax #: 317-635-9065

Proj. Manager:

Sarah Jacobs

Proj. Name/Number: Michigan Plaza / M01096

Sampler's signature: J.D.

Company :	Microseeps, Inc.		
Co. Address :	16 S. Orange Ave, Suite 400, Philadelphia, PA, 19102		
Phone # :	317-635-9060		
Proj. Manager :	Sarah Jacobs		
Proj. Name/Number :	Michigan Plaza / M01096		
Sampler's signature :	<u>J.D.</u>		
Parameters Requested			
Results to : <u>Mark Weis</u> <u>Mundell &amp; Assoc.</u>			
Invoice to : <u>Merle Leibbe</u> <u>Mundell &amp; Assoc.</u>			

Sample ID	Sample Description	Sample Type Water/Vapor/Solid	Date	Time AM/PM	Temp F/C	Remarks	
1 MMW-P-035	water	X	11/19/11	10:51A	2	X	
2 MMW-P-035			11/19/11	10:58P	2		
3 MMW-P-035			11/19/11	11:05A	2		
4 MMW-P-035			11/19/11	11:54A	2		
5 MMW-P-035			11/20/11	3:17P	2		
6 MMW-P-035			11/20/11	2:32P	2		
7 MMW-P-035			11/20/11	1:41P	2		
8 MMW-P-035			11/20/11	12:25P	2		
9 MMW-P-035			11/20/11	1:22P	2		
10 MMW-P-035			11/20/11	2:56P	2		
11 MMW-P-035			11/20/11	3:37P	2		
12 MMW-P-10D			11/20/11	4:22P	2		
13 MMW-C-02			11/20/11	5:56P	2		
14 Dup			11/20/11	6:23P	2		
Relinquished by : <u>A.J.</u>	Company : <u>Mundell</u>	Date : <u>11/22/11</u>	Time : <u>11:55A</u>	Received by : <u>✓</u>	Company : <u>✓</u>	Date : <u>11/25</u>	Time : <u>new</u>
Relinquished by : <u></u>	Company : <u></u>	Date : <u></u>	Time : <u></u>	Received by : <u></u>	Company : <u></u>	Date : <u></u>	Time : <u></u>
Relinquished by : <u></u>	Company : <u></u>	Date : <u></u>	Time : <u></u>	Received by : <u></u>	Company : <u></u>	Date : <u></u>	Time : <u></u>

PINK COPY : Laboratory File

YELLOW COPY : Accompany Samples

WHITE COPY : Submitter

## Sarah Webb

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**From:** Chieh-ling Lai  
**Sent:** Monday, March 14, 2011 4:43 PM  
**To:** Sarah Webb  
**Subject:** FW: Microseeps Project P1101262

See below for Microseeps response.

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**From:** Dave Unrue [<mailto:dunrue@microseeps.com>]

**Sent:** Monday, March 14, 2011 4:39 PM

**To:** Chieh-ling Lai

**Subject:** Microseeps Project P1101262

Following up your question on the above referenced project, below is a detailed explanation of the 'B' flag on your report.

In order to obtain low reporting limits under AM23G, samples must be filtered of solids and interfering compounds that can cause false positives of reported analytes. A new filter is used for every batch and occasionally we will have a hit of a non-targeted component that elutes at the same time as Lactic Acid in the method blank. It may or not be Lactic Acid. There are only 2 suppliers of these cartridges, we have discussed it with them and tried various additional cleaning measures, but the compound hit still shows up on occasion.

For samples MMW-9S, MMW-9S MS & MMW-9S MSD, they had received a 'B' flag because there was a reportable result. The other results received 'UB' flags because there wasn't a reportable result, but since those results were tied to the batch blank with a 'hit' of Lactic Acid, NELAP requires a 'B' flag for those results as well.

Our lab MS & MSD had good recovery and we feel the data is valid. Sample MMW-9S results could be suspect because of its correlation with the method blank hit.

I hope this explanation helps. If you would need anything else don't hesitate to get in contact with me.

Thanks,

Dave

Check out our blog, [Insituution](#), for discussions and insights into our cutting edge tools!

David K. Unrue  
Technical Sales Manager  
Microseeps, Inc.  
University of Pittsburgh Applied Research Center  
220 William Pitt Way  
Pittsburgh, PA 15238  
Ph: 412-826-5245  
Fax: 412-826-3433  
Cell: 412-999-0990  
[dunrue@microseeps.com](mailto:dunrue@microseeps.com)  
[www.microseeps.com](http://www.microseeps.com)

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## **APPENDIX B**

### **Air Mitigation Systems: Pounds of Contaminants Removed**

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	Perchloroethylene (PCE)											
	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4
	(ppmv)				(ppm)				(\mu g/m³)			
9/21/2006	0.6300	0.7900	0.6700	0.2800	0.0043	0.0054	0.0046	0.0019	4281.48	5368.84	4553.32	1902.88
10/6/2006	0.8800	0.6700	0.9700	0.3100	0.0060	0.0046	0.0066	0.0021	5980.48	4553.32	6592.12	2106.76
10/13/2006	0.6800	0.3600	0.5200	0.2100	0.0046	0.0024	0.0035	0.0014	4621.28	2446.56	3533.92	1427.16
10/20/2006	0.8700	0.5500	0.8900	0.2200	0.0059	0.0037	0.0060	0.0015	5912.52	3737.80	6048.44	1495.12
11/17/2006	0.8100	0.4700	0.7800	0.1500	0.0055	0.0032	0.0053	0.0010	5504.76	3194.12	5300.88	1019.40
12/27/2006	0.7400	0.4700	0.7500	0.1100	0.0050	0.0032	0.0051	0.0007	5029.04	3194.12	5097.00	747.56
3/30/2007	0.5100	0.1800	0.5700	0.0310	0.0035	0.0012	0.0039	0.0002	3465.96	1223.28	3873.72	210.68
6/15/2007	0.0050	0.3100	0.2100	0.4600	0.0000	0.0021	0.0014	0.0031	33.98	2106.76	1427.16	3126.16
10/16/2007	0.3900	0.2400	0.2800	0.0670	0.0027	0.0016	0.0019	0.0005	2650.44	1631.04	1902.88	455.33
12/14/2007	0.5800	0.3400	0.5200	0.1400	0.0039	0.0023	0.0035	0.0010	3941.68	2310.64	3533.92	951.44
3/27/2008	0.5500	NS	0.5600	0.0740	0.0037	NS	0.0038	0.0005	3737.80	NS	3805.76	502.90
4/1/2008	NS	0.3600	NS	NS	NS	0.0024	NS	NS	2446.56	NS	NS	NS
6/2/2008	0.7200	0.5600	0.4900	0.1000	0.0049	0.0038	0.0033	0.0007	4893.12	3805.76	3330.04	679.60
9/12/2008	0.4800	0.4700	0.5300	0.1300	0.0033	0.0032	0.0036	0.0009	3262.08	3194.12	3601.88	883.48
11/26/2008	0.4600	NS	0.3600	0.1100	0.0031	NS	0.0024	0.0007	3126.16	NS	2446.56	747.56
3/24/2009	0.4500	NS	0.5500	0.0050	0.0031	NS	0.0037	0.00003	3058.20	NS	3737.80	33.98
6/15/2009	0.4300	NS	0.4200	0.0200	0.0029	NS	0.0029	0.0001	2922.28	NS	2854.32	135.92
8/21/2009	0.3600	0.1600	0.4700	0.0140	0.0024	0.0011	0.0032	0.0001	2446.56	1087.36	3194.12	95.14
11/5/2009	0.3300	0.1400	0.4100	0.0050	0.0022	0.0010	0.0028	0.0000	2242.68	951.44	2786.36	33.98
2/5/2010	0.1600	0.0370	0.1400	0.0120	0.0011	0.0003	0.0010	0.0001	1087.36	251.45	951.44	81.55
4/23/2010	0.1300	NS	NS	0.0170	0.0009	NS	NS	0.0001	883.48	NS	NS	115.53
5/6/2010	NS	0.1500	0.2500	NS	NS	0.0010	0.0017	NS	NS	1019.40	1699.00	NS
7/23/2010	0.1500	0.1900	0.1200	0.0050	0.0010	0.0013	0.0008	0.00003	1019.40	1291.24	815.52	33.98
10/13/2010	NS	NS	NS	0.0050	NS	NS	NS	0.00003	NS	NS	NS	33.98
10/15/2010	0.0940	0.0650	0.0050	NS	0.0006	0.0004	0.0000	NS	638.82	441.74	33.98	NS
1/21/2011	0.1400	0.0270	NS	0.0050	0.0010	0.0002	NS	0.00003	951.44	183.49	NS	33.98
4/8/2011	NS	NS	0.2100	NS	NS	NS	0.0014	NS	NS	NS	1427.16	NS

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	Trichloroethylene (TCE)											
	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4
	(ppmv)				(ppm)				( $\mu\text{g}/\text{m}^3$ )			
9/21/2006	0.0240	0.0120	0.0050	0.0050	0.0001	0.0001	0.00003	0.00003	129.24	64.62	26.93	26.93
10/6/2006	0.0120	0.0050	0.0050	0.0050	0.0001	0.00003	0.00003	0.00003	64.62	26.93	26.93	26.93
10/13/2006	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
10/20/2006	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
11/17/2006	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
12/27/2006	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
3/30/2007	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
6/15/2007	0.4600	0.0050	0.0050	0.0050	0.0025	0.00003	0.00003	0.00003	2,477.10	26.93	26.93	26.93
10/16/2007	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
12/14/2007	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
3/27/2008	0.0050	NS	0.0050	0.0050	0.00003	NS	0.00003	0.00003	26.93	NS	26.93	26.93
4/1/2008	NS	0.0050	NS	NS	0.0000	NS	NS	NS	26.93	NS	NS	NS
6/2/2008	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
9/12/2008	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
11/26/2008	0.0050	NS	0.0050	0.0050	0.00003	NS	0.00003	0.00003	26.93	NS	26.93	26.93
3/24/2009	0.0050	NS	0.0050	0.0050	0.00003	NS	0.00003	0.00003	26.93	NS	26.93	26.93
6/15/2009	0.0050	NS	0.0050	0.0050	0.00003	NS	0.00003	0.00003	26.93	NS	26.93	26.93
8/21/2009	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
11/5/2009	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
2/5/2010	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
4/23/2010	0.0050	NS	NS	0.0050	0.00003	NS	NS	0.00003	26.93	NS	NS	26.93
5/6/2010	NS	0.0050	0.0050	NS	NS	0.00003	0.00003	NS	26.93	26.93	26.93	NS
7/23/2010	0.0050	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	0.00003	26.93	26.93	26.93	26.93
10/13/2010	NS	NS	NS	0.0050	NS	NS	NS	0.00003	NS	NS	NS	26.93
10/15/2010	0.0050	0.0050	0.0050	NS	0.00003	0.00003	0.00003	NS	26.93	26.93	26.93	NS
1/21/2011	0.0050	0.0050	NS	0.0050	0.00003	0.00003	NS	0.00003	26.93	26.93	NS	26.93
4/8/2011	NS	NS	0.0050	NS	NS	NS	0.0000	NS	NS	NS	26.93	NS

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	Vinyl Chloride											
	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4
	(ppmv)				(ppm)				(\mu g/m³)			
9/21/2006	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
10/6/2006	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
10/13/2006	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
10/20/2006	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
11/17/2006	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
12/27/2006	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
3/30/2007	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
6/15/2007	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
10/16/2007	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
12/14/2007	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
3/27/2008	0.0150	NS	0.0150	0.0150	0.00004	NS	0.00004	0.00004	38.42	NS	38.42	38.42
4/1/2008	NS	0.0150	NS	NS	NS	0.00004	NS	NS	NS	38.42	NS	NS
6/2/2008	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
9/12/2008	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
11/26/2008	0.0150	NS	0.0150	0.0150	0.00004	NS	0.00004	0.00004	38.42	NS	38.42	38.42
3/24/2009	0.0150	NS	0.0150	0.0150	0.00004	NS	0.00004	0.00004	38.42	NS	38.42	38.42
6/15/2009	0.0150	NS	0.0150	0.0150	0.00004	NS	0.00004	0.00004	38.42	NS	38.42	38.42
8/21/2009	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
11/5/2009	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
2/5/2010	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
4/23/2010	0.0150	NS	NS	0.0150	0.00004	NS	NS	0.00004	38.42	NS	NS	38.42
5/6/2010	NS	0.0150	0.0150	NS	NS	0.00004	0.00004	NS	NS	38.42	38.42	NS
7/23/2010	0.0150	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	0.00004	38.42	38.42	38.42	38.42
10/13/2010	NS	NS	NS	0.0150	NS	NS	NS	0.00004	NS	NS	NS	38.42
10/15/2010	0.0150	0.0150	0.0150	NS	0.00004	0.00004	0.00004	NS	38.42	38.42	38.42	NS
1/21/2011	0.0150	0.0150	NS	0.0150	0.00004	0.00004	NS	0.00004	38.42	38.42	NS	38.42
4/8/2011	NS	NS	0.0150	NS	NS	NS	0.00004	NS	NS	NS	38.42	NS

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Plaza**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	cis-1,2-Dichloroethylene											
	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4	B-1	B-2	B-3	B-4
	(ppmv)				(ppm)				( $\mu\text{g}/\text{m}^3$ )			
9/21/2006	0.1400	0.0100	0.0100	0.0100	0.0006	0.00004	0.00004	0.00004	556.22	39.73	39.73	39.73
10/6/2006	0.0300	0.0100	0.0100	0.0100	0.0001	0.00004	0.00004	0.00004	119.19	39.73	39.73	39.73
10/13/2006	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
10/20/2006	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
11/17/2006	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
12/27/2006	0.0240	0.0100	0.0100	0.0100	0.0001	0.00004	0.00004	0.00004	95.35	39.73	39.73	39.73
3/30/2007	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
6/15/2007	0.2100	0.0100	0.0100	0.0100	0.0008	0.00004	0.00004	0.00004	834.33	39.73	39.73	39.73
10/16/2007	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
12/14/2007	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
3/27/2008	0.0340	NS	0.0100	0.0100	0.0001	NS	0.00004	0.00004	135.08	NS	39.73	39.73
4/1/2008	NS	0.0100	NS	NS	NS	0.00004	NS	NS	NS	39.73	NS	NS
6/2/2008	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
9/12/2008	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
11/26/2008	0.0100	NS	0.0100	0.0100	0.00004	NS	0.00004	0.00004	39.73	NS	39.73	39.73
3/24/2009	0.0100	NS	0.0100	0.0100	0.00004	NS	0.00004	0.00004	39.73	NS	39.73	39.73
6/15/2009	0.0100	NS	0.0100	0.0100	0.00004	NS	0.00004	0.00004	39.73	NS	39.73	39.73
8/21/2009	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
11/5/2009	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
2/5/2010	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
4/23/2010	0.0100	NS	NS	0.0100	0.00004	NS	NS	0.00004	39.73	NS	NS	39.73
5/6/2010	NS	0.0100	0.0100	NS	NS	0.00004	0.00004	NS	NS	39.73	39.73	NS
7/23/2010	0.0100	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	0.00004	39.73	39.73	39.73	39.73
10/13/2010	NS	NS	NS	0.0100	NS	NS	NS	0.00004	NS	NS	NS	39.73
10/15/2010	0.0100	0.0100	0.0100	NS	0.00004	0.00004	0.00004	NS	39.73	39.73	39.73	NS
1/21/2011	0.0100	0.0100	NS	0.0100	0.00004	0.00004	NS	0.00004	39.73	39.73	NS	39.73
4/8/2011	NS	NS	0.0500	NS	NS	NS	0.0002	NS	NS	NS	198.65	NS

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Meadows Apartments**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	Perchloroethylene (PCE)								
	B-5	B-6	B-7	B-5	B-6	B-7	B-5	B-6	B-7
	(ppmv)			(ppm)			( $\mu\text{g}/\text{m}^3$ )		
3/27/2008	0.1300	1.2000	NS	0.0009	0.0082	NS	883.48	8155.20	NS
3/28/2008	0.0730	0.4900	NS	0.0005	0.0033	NS	496.11	3330.04	NS
4/7/2008	NS	NS	0.0760	NS	NS	0.0005	NS	NS	516.50
4/8/2008	NS	NS	0.0470	NS	NS	0.0003	NS	NS	319.41
4/24/2008	0.0540	0.1100	0.0220	0.0004	0.0007	0.0001	366.98	747.56	149.51
5/1/2008	0.0580	0.2100	0.0390	0.0004	0.0014	0.0003	394.17	1427.16	265.04
6/2/2008	0.0590	0.2200	0.0530	0.0004	0.0015	0.0004	400.96	1495.12	360.19
7/10/2008	0.0650	NS	0.0540	0.0004	NS	0.0004	441.74	NS	366.98
8/20/2008	NS	0.2700	NS	NS	0.0018	NS	NS	1834.92	NS
9/12/2008	0.0690	0.1800	0.0540	0.0005	0.0012	0.0004	468.92	1223.28	366.98
11/26/2008	0.0720	0.1100	0.0560	0.0005	0.0007	0.0004	489.31	747.56	380.58
3/24/2009	0.2100	0.1300	0.0590	0.0014	0.0009	0.0004	1427.16	883.48	400.96
6/15/2009	0.0580	0.0840	<i>0.0050</i>	0.0004	0.0006	<i>0.00003</i>	394.17	570.86	33.98
8/21/2009	0.0630	0.0710	<i>0.0050</i>	0.0004	0.0005	<i>0.00003</i>	428.15	482.52	33.98
11/5/2009	0.1300	0.1100	<i>0.0050</i>	0.0009	0.0007	<i>0.00003</i>	883.48	747.56	33.98
2/5/2010	0.0220	0.0800	<i>0.0050</i>	0.0001	0.0005	<i>0.00003</i>	149.51	543.68	33.98
2/6/2010	0.0220	0.0800	<i>0.0050</i>	0.0001	0.0005	<i>0.00003</i>	149.51	543.68	33.98
4/23/2010	0.0120	NS	<i>0.0050</i>	0.0001	NS	<i>0.00003</i>	81.55	NS	33.98
5/12/2010	NS	0.1300	NS	NS	0.0009	NS	NS	883.48	NS
7/23/2010	0.0270	0.1000	<i>0.0050</i>	0.0002	0.0007	<i>0.00003</i>	183.49	679.60	33.98
10/15/2010	0.0150	0.0190	<i>0.0050</i>	0.0001	0.0001	<i>0.00003</i>	101.94	129.12	33.98
1/21/2011	0.0330	0.0490	<i>0.0050</i>	0.0002	0.0003	<i>0.00003</i>	224.27	333.00	33.98

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Meadows Apartments**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	Trichloroethylene (TCE)								
	B-5	B-6	B-7	B-5	B-6	B-7	B-5	B-6	B-7
	(ppmv)			(ppm)			( $\mu\text{g}/\text{m}^3$ )		
3/27/2008	0.0050	0.0050	NS	0.00003	0.00003	NS	26.93	26.93	NS
3/28/2008	0.0050	0.0050	NS	0.00003	0.00003	NS	26.93	26.93	NS
4/7/2008	NS	NS	0.0050	NS	NS	0.00003	NS	NS	26.93
4/8/2008	NS	NS	0.0050	NS	NS	0.00003	NS	NS	26.93
4/24/2008	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
5/1/2008	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
6/2/2008	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
7/10/2008	0.0050	NS	0.0050	0.00003	NS	0.00003	26.93	NS	26.93
8/20/2008	NS	0.0050	NS	NS	0.00003	NS	NS	26.93	NS
9/12/2008	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
11/26/2008	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
3/24/2009	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
6/15/2009	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
8/21/2009	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
11/5/2009	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
2/5/2010	0.0050	0.0011	0.0050	0.00003	0.00001	0.00003	26.93	5.92	26.93
2/6/2010	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
4/23/2010	0.0050	NS	0.0050	0.00003	NS	0.00003	26.93	NS	26.93
5/12/2010	NS	0.0050	NS	NS	0.00003	NS	NS	26.93	NS
7/23/2010	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
10/15/2010	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93
1/21/2011	0.0050	0.0050	0.0050	0.00003	0.00003	0.00003	26.93	26.93	26.93

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**

**Air Mitigation System - Historical Air Analytical Results**

**Michigan Meadows Apartments**

**Indianapolis, Indiana**

**MUNDELL Project No.: M01046**

Sample Date	Vinyl Chloride								
	B-5	B-6	B-7	B-5	B-6	B-7	B-5	B-6	B-7
	(ppmv)			(ppm)			( $\mu\text{g}/\text{m}^3$ )		
3/27/2008	0.0150	0.0150	NS	0.00004	0.00004	NS	38.42	38.42	NS
3/28/2008	0.0150	0.0150	NS	0.00004	0.00004	NS	38.42	38.42	NS
4/7/2008	NS	NS	0.0150	NS	NS	0.00004	NS	NS	38.42
4/8/2008	NS	NS	0.0150	NS	NS	0.00004	NS	NS	38.42
4/24/2008	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
5/1/2008	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
6/2/2008	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
7/10/2008	0.0150	NS	0.0150	0.00004	NS	0.00004	38.42	NS	38.42
8/20/2008	NS	0.0150	NS	NS	0.00004	NS	NS	38.42	NS
9/12/2008	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
11/26/2008	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
3/24/2009	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
6/15/2009	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
8/21/2009	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
11/5/2009	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
2/5/2010	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
2/6/2010	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
4/23/2010	0.0150	NS	0.0150	0.00004	NS	0.00004	38.42	NS	38.42
5/12/2010	NS	0.0150	NS	NS	0.00004	NS	NS	38.42	NS
7/23/2010	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
10/15/2010	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42
1/21/2011	0.0150	0.0150	0.0150	0.00004	0.00004	0.00004	38.42	38.42	38.42

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**APPENDIX B**  
**Air Mitigation System - Historical Air Analytical Results**  
**Michigan Meadows Apartments**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	cis-1,2-Dichloroethylene								
	B-5	B-6	B-7	B-5	B-6	B-7	B-5	B-6	B-7
	(ppmv)			(ppm)			( $\mu\text{g}/\text{m}^3$ )		
3/27/2008	0.0100	0.0100	NS	0.00004	0.00004	NS	39.73	39.73	NS
3/28/2008	0.0100	0.0100	NS	0.00004	0.00004	NS	39.73	39.73	NS
4/7/2008	NS	NS	0.0100	NS	NS	0.00004	NS	NS	39.73
4/8/2008	NS	NS	0.0100	NS	NS	0.00004	NS	NS	39.73
4/24/2008	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
5/1/2008	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
6/2/2008	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
7/10/2008	0.0100	NS	0.0100	0.00004	NS	0.00004	39.73	NS	39.73
8/20/2008	NS	0.0100	NS	NS	0.00004	NS	NS	39.73	NS
9/12/2008	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
11/26/2008	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
3/24/2009	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
6/15/2009	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
8/21/2009	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
11/5/2009	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
2/5/2010	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
2/6/2010	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
4/23/2010	0.0100	NS	0.0100	0.00004	NS	0.00004	39.73	NS	39.73
5/12/2010	NS	0.0100	NS	NS	0.00004	NS	NS	39.73	NS
7/23/2010	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
10/15/2010	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73
1/21/2011	0.0100	0.0100	0.0100	0.00004	0.00004	0.00004	39.73	39.73	39.73

NS = Not sampled

*Italic* = Reported concentrations are estimated values (J-flagged values) or below laboratory detection limits. Concentrations of PCE, TCE, and cis-1,2-DCE are assumed to be one-half the laboratory practical quantitation limit (PQL). Concentrations of vinyl chloride are assumed to be 0.015 ppmv, representing the mean detected concentration below laboratory reporting limits.

**Lab Data for Air Mitigation System B-1**  
 First Quarter 2011  
 1/21/2011  
 Michigan Plaza  
 3801-3823 West Michigan Street  
 Indianapolis, Indiana  
 MUNDELL Project No.: M01046

Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	B-1 (Lab Data)				B-1 (PID Readings)				
				µg/m³ PCE removed	µg/m³ TCE removed	µg/m³ PCE removed	µg/m³ TCE removed	µg/m³ VC removed	µg/m³ DCE removed	Lbs. cis-1,2-DCE removed	Lbs. cis-1,2-DCE removed	
9/21/2006	0.5	73	2,190	4,281	0.00	129	0.00	38	0.00	556	0.00	0.00
10/6/2006	360	73	1,576,800	5,980	0.59	65	0.01	38	0.00	119	0.01	0.61
10/13/2006	168	73	735,840	4,621	0.21	27	0.00	38	0.00	40	0.00	0.22
10/20/2006	168	73	735,840	5,913	0.27	27	0.00	38	0.00	40	0.00	0.28
11/17/2006	672	73	2,943,360	5,505	1.01	27	0.00	38	0.01	40	0.01	1.10
12/27/2006	960	73	4,204,800	5,029	1.32	27	0.01	38	0.01	95	0.03	1.36
3/30/2007	2,232	73	9,776,160	3,466	2.11	27	0.02	38	0.02	40	0.02	2.18
6/15/2007	1,848	73	8,094,240	34	0.02	2,477	1.25	38	0.02	834	0.42	1.71
10/16/2007	2,952	73	12,929,760	2,650	2.14	27	0.02	38	0.03	40	0.03	2.22
12/14/2007	1,416	73	6,202,080	3,942	1.52	27	0.01	38	0.01	40	0.02	1.57
3/27/2008	2,496	73	10,932,480	3,738	2.55	27	0.02	38	0.03	135	0.09	2.69
6/2/2008	1,608	73	7,043,040	4,893	2.15	27	0.01	38	0.02	40	0.02	2.20
9/12/2008	2,448	73	10,722,240	3,262	2.18	27	0.02	38	0.03	40	0.03	2.25
11/26/2008	1,800	73	7,884,000	3,126	1.54	27	0.01	38	0.02	40	0.02	1.59
3/24/2009	2,832	73	12,404,160	3,058	2.37	27	0.02	38	0.03	40	0.03	2.45
6/15/2009	1,992	73	8,724,960	2,922	1.59	27	0.01	38	0.02	40	0.02	1.65
8/21/2009	1,608	73	7,043,040	2,447	1.07	27	0.01	38	0.02	40	0.02	1.12
11/5/2009	1,824	73	7,989,120	2,243	1.12	27	0.01	38	0.02	40	0.02	1.17
2/5/2010	2,208	73	9,671,040	1,087	0.66	27	0.02	38	0.02	40	0.02	0.72
4/23/2010	1,848	55	6,098,400	883	0.34	27	0.01	38	0.01	40	0.02	0.38
7/23/2010	2,184	55	7,207,200	1,019	0.46	27	0.01	38	0.02	40	0.02	0.51
10/15/2010	2,016	73	8,830,080	639	0.35	27	0.01	38	0.02	40	0.02	0.41
1/21/2011	2,352	55	7,761,600	951	0.46	27	0.01	38	0.02	40	0.02	0.51
<b>TOTALS:</b>	<b>37,993</b>		<b>159,512,430</b>		<b>26.03</b>		<b>1.51</b>		<b>0.38</b>		<b>0.88</b>	<b>28.80</b>
										<b>37,296</b>		<b>42.86</b>
										<b>158,483,520</b>		
										<b>19.98</b>		<b>22.34</b>
										<b>17,61</b>		<b>19.88</b>
										<b>55</b>		<b>55</b>
										<b>7,761,600</b>		<b>4,841</b>
										<b>19</b>		<b>2.34</b>
												<b>42.86</b>

**Lab Data for Air Mitigation System B-2**  
 First Quarter 2011  
 1/21/2011  
**Michigan Plaza**  
**3801-3825 West Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

B-2 (Lab Data)												B-2 (PID Readings)									
Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	µg/m³ PCE removed	µg/m³ TCE removed	Lbs. PCE removed	µg/m³ TCE removed	Lbs. VC removed	µg/m³ VC removed	Lbs. cis-1,2-DCE removed	Lbs. cis-1,2-DCE removed	Cumulative PCE lbs. Removed	Cumulative Total Pollution lbs. Removed	Sample Date	Hours Per Cycle	Average Flow Rate (CFM)	FID Reading (ppm VOCs)	µg/m³ VOCs	Lbs. VOCs Removed	Cum Total lbs. Removed (Est from PID)	
9/2/2006	0.5	37	1,110	5,369	0.00	65	0.00	38	0.00	40	0.00	0.00	0.00	11/17/2006	672.0	37	1,491,840	0.1	1,483	0.14	
10/6/2006	360	37	79,200	4,563	0.23	27	0.00	38	0.00	40	0.00	0.23	0.23	12/27/2006	960	37	2,131,200	0.1	1,483	0.20	
10/13/2006	168	37	372,960	2,447	0.06	27	0.00	38	0.00	40	0.00	0.06	0.28	6/15/2007	4,080	37	9,057,600	0.1	1,483	0.84	
10/20/2006	168	37	372,960	3,738	0.09	27	0.00	38	0.00	40	0.00	0.09	0.37	10/16/2007	2,952	37	6,553,440	0.1	1,483	0.61	
11/17/2006	672	37	1,491,840	3,194	0.30	27	0.00	38	0.00	40	0.00	0.31	0.67	12/14/2007	1,416	55	4,672,800	0.1	1,483	0.43	
12/27/2006	960	37	2,131,200	3,194	0.42	27	0.00	38	0.01	40	0.01	0.44	1.09	6/2/2008	4,104	132	32,503,680	1.5	4,095	8.30	
3/30/2007	2,232	38	5,088,960	1,223	0.39	27	0.01	38	0.01	40	0.01	0.42	1.48	9/12/2008	2,448	37	5,434,560	0.5	2,229	0.76	
6/15/2007	1,848	42	4,656,960	2,107	0.61	27	0.01	38	0.01	40	0.01	0.64	2.09	8/21/2009	8,232	55	27,165,600	2.4	5,774	9.79	
10/16/2007	2,952	48	8,501,760	1,631	0.86	27	0.01	38	0.02	40	0.02	0.92	2.96	11/5/2009	1,824	94	10,287,360	1.6	4,282	2.75	
12/14/2007	1,416	53	4,502,860	2,311	0.65	27	0.01	38	0.01	40	0.01	0.68	3.61	3/7/2010	2,008	55	7,286,400	0.6	2,416	1.10	
4/1/2008	2,616	50	7,848,000	2,447	1.20	27	0.01	38	0.02	40	0.02	1.25	4.81	5/6/2010	2,160	37	4,785,200	1.4	3,908	1.17	
6/2/2008	1,488	42	3,705,120	3,806	0.88	27	0.01	38	0.01	40	0.01	0.90	5.68	10/15/2010	3,888	55	12,830,400	3.2	7,267	5.82	
9/12/2008	2,448	37	5,434,560	3,194	1.08	27	0.01	38	0.01	40	0.01	1.12	6.77	12/1/2011	2,352	55	7,761,600	1.4	3,908	33.78	
8/21/2009	1,440	37	3,196,800	1,087	0.22	27	0.01	38	0.01	40	0.01	0.24	6.98	7/30	<b>TOTALS:</b> 37,296						<b>33.78</b>
11/5/2009	1,824	37	4,049,280	951	0.24	27	0.01	38	0.01	40	0.01	0.27	7.22	7/57	<b>TOTALS:</b> 131,971,680						
2/5/2010	2,208	55	7,286,400	251	0.11	27	0.01	38	0.02	40	0.02	0.16	7.34	7/73							
5/6/2010	2,160	37	4,795,200	1,019	0.30	27	0.01	38	0.01	40	0.01	0.34	7.64	8/06							
7/23/2010	1,872	37	4,155,840	1,291	0.33	27	0.01	38	0.01	40	0.01	0.36	7.98	8/43							
10/15/2010	2,016	55	6,652,800	442	0.18	27	0.01	38	0.02	40	0.02	0.23	8.16	8/65							
1/21/2011	2,852	55	7,761,600	183	0.09	27	0.01	38	0.02	40	0.02	0.14	8.25	8/79							
<b>TOTALS:</b>	<b>31,201</b>		<b>82,965,430</b>		<b>8.25</b>		<b>0.14</b>		<b>0.20</b>		<b>0.21</b>		<b>8.79</b>								

**Lab Data for Air Mitigation System B-3**  
 First Quarter 2011  
 1/21/2011 & 4/9/2011  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

B-3 (Lab Data)												B-3 (PID Readings)									
Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	µg/m³ PCE removed	Lbs. PCE removed	µg/m³ TCE removed	Lbs. TCE removed	µg/m³ VC removed	Lbs. VC removed	µg/m³ Cis-1,2-DCE removed	Lbs. cis-1,2-DCE removed	Cumulative Pollutants Removed	Sample Date	Hours Per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	FID Reading (ppm VOCs)	Lbs. VOCs Removed	Cum Total lbs Removed (Est from nID)		
9/21/2006	0.5	132	3,960	4,553	0.00	27	0.00	38	0.00	40	0.00	0.00	11/17/2006	672	132	5,322,240	2.0	5,028	1,67		
10/6/2006	360	132	2,851,200	6,592	1.17	27	0.00	38	0.01	40	0.01	1.19	11/17/2006	960	132	7,603,200	0.1	1,483	0.70		
10/13/2006	168	132	1,330,560	3,534	0.29	27	0.00	38	0.00	40	0.00	1.47	6/15/2007	4,080	132	32,313,600	0.1	1,483	2.99		
10/20/2006	168	132	1,330,560	6,048	0.50	27	0.00	38	0.00	40	0.00	1.97	10/16/2007	2,952	132	23,379,840	0.1	1,483	2.16		
11/17/2006	672	132	5,322,240	5,301	1.76	27	0.01	38	0.01	40	0.01	1.79	12/14/2007	1,416	132	11,214,720	0.1	1,483	1.04		
12/27/2006	960	132	7,603,200	5,697	2.42	27	0.01	38	0.02	40	0.02	2.47	6/22/2008	4,104	55	13,949,200	1.2	3,555	2.99		
3/30/2007	2,232	132	17,677,440	3,874	4.27	27	0.03	38	0.04	40	0.04	4.39	10/12/2008	2,448	132	19,388,160	0.5	2,229	2.70		
6/15/2007	1,848	132	14,638,160	1,427	1.30	27	0.02	38	0.04	40	0.04	1.40	11/28/2008	1,800	132	14,256,100	0.8	2,789	2.48		
10/16/2007	2,952	132	23,379,840	1,903	2.78	27	0.04	38	0.06	40	0.06	2.93	8/21/2009	6,432	132	50,941,440	0.0	1,296	4.12		
12/14/2007	1,416	132	11,214,720	3,534	2.47	27	0.02	38	0.03	40	0.03	2.55	16/17	17,53	132	14,446,080	1.8	4,655	4.19		
3/27/2008	2,496	132	19,768,320	3,808	4.69	27	0.03	38	0.05	40	0.05	4.82	21/6	22,35	132	17,487,360	1.5	4,095	4.47		
6/2/2008	1,608	132	12,738,360	3,330	2.65	27	0.02	38	0.03	40	0.03	2.73	24/31	25,08	132	17,107,200	1.7	4,488	4.77		
9/12/2008	2,448	132	19,388,160	3,602	4.36	27	0.03	38	0.05	40	0.05	4.48	10/15/2010	3,888	132	30,792,960	0.1	1,483	2.85		
11/26/2008	1,800	132	14,256,000	2,447	2.18	27	0.02	38	0.03	40	0.04	2.27	31/8	3,240	132	49,420,800	1.4	3,908	12.05		
3/24/2009	2,832	132	22,428,440	3,738	5.23	27	0.04	38	0.05	40	0.06	5.38	36/37	37.21	133	33,516,000	2.4	5,774	12.07		
6/15/2009	1,992	132	15,775,640	2,854	2.81	27	0.03	38	0.04	40	0.04	2.91	38/38	40.12	<b>TOTALS:</b>						
8/2/2009	1,608	132	12,738,360	3,194	2.54	27	0.02	38	0.03	40	0.03	2.62	41/41	42.74	<b>TOTALS:</b>						
11/5/2009	1,824	132	14,446,080	2,786	2.51	27	0.02	38	0.03	40	0.04	2.61	43/33	45.35							
2/5/2010	2,208	132	17,487,360	951,44	1.04	26,93	0.03	38	0.04	40	0.04	1.15	44/46	46.50							
5/6/2010	2,160	132	17,107,200	1,699	1.81	27	0.03	38	0.04	40	0.04	1.93	46/48	48.42							
7/23/2010	1,872	132	14,286,240	816	0.75	27	0.02	38	0.04	40	0.04	0.85	47/53	49.28							
10/15/2010	2,016	132	15,866,720	34	0.03	27	0.03	38	0.04	40	0.04	0.14	47/56	49.41							
1/21/2011	4,368	132	34,594,560	NS	0.00	NS	0.00	NS	0.00	NS	0.00	0.00	47/53	49.28							
4/8/2011	4,200	133	33,516,000	1,427	2.98	27	0.06	38	0.08	189	0.42	3.54	50/55	52.95							
<b>TOTALS:</b>	<b>44,209</b>		<b>350,383,320</b>		<b>50.55</b>		<b>0.53</b>		<b>0.76</b>		<b>1.11</b>	<b>52.95</b>		<b>61.24</b>							

**Lab Data for Air Mitigation System B-4**  
 First Quarter 2011  
 1/21/2011  
**Michigan Plaza**  
**3801-3823 West, Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CFM)	B-4 (Lab Data)			B-4 (PID Readings)														
				µg/m <sup>3</sup> PCE removed	µg/m <sup>3</sup> TCE removed	Lbs. PCE removed	Lbs. TCE removed	µg/m <sup>3</sup> VC removed	Lbs. VC removed	Lbs. cis-1,2-DCE removed	Lbs. cis-1,2-DCE removed	Average Flow Rate (CFM)	Hours Per Cycle	Sample Date	PID Reading (ppm VOCs)	Lbs. VOCs Removed	Cum Total lbs. Removed (Est from PID)				
9/21/2006	0.5	132	3,960	1,903	0.00	27	0.00	38	0.00	40	0.00	0.00	0.00	11/17/2006	672	132	5,322,240	0.1	1,483	0.49	
10/6/2006	360	132	2,851,200	2,107	0.37	27	0.00	38	0.01	40	0.01	0.39	0.38	12/27/2006	960	132	7,603,200	0.1	1,483	0.70	
10/13/2006	168	132	1,330,560	1,427	0.12	27	0.00	38	0.00	40	0.00	0.13	0.49	6/15/2007	4,080	132	32,313,600	0.1	1,483	2.99	
10/20/2006	168	132	1,330,560	1,495	0.12	27	0.00	38	0.00	40	0.00	0.13	0.62	10/16/2007	2,952	132	23,379,840	0.1	1,483	2.16	
11/17/2006	672	132	5,322,240	1,019	0.34	27	0.01	38	0.01	40	0.01	0.37	0.96	12/14/2007	1,416	132	11,214,720	0.1	1,483	1.04	
12/27/2006	960	132	7,603,200	748	0.35	27	0.01	38	0.02	40	0.02	0.40	1.31	3/29/2008	2,544	132	20,148,860	1.8	4,665	5.85	
3/30/2007	2,232	130	17,342,640	211	0.23	27	0.03	38	0.04	40	0.04	0.34	1.54	6/2/2008	1,560	132	12,555,200	0.3	1,856	1.43	
6/15/2007	1,848	125	13,887,720	3,126	2.71	27	0.02	38	0.03	40	0.03	2.80	4.25	9/12/2008	2,448	132	19,388,160	0.4	2,042	2.47	
10/16/2007	2,952	128	22,627,080	455	0.64	27	0.04	38	0.05	40	0.06	0.79	5.36	11/26/2008	1,800	132	14,256,000	0.1	1,483	1.32	
12/14/2007	1,416	132	11,214,720	951	0.67	27	0.02	38	0.03	40	0.03	0.74	5.56	6/21/2009	6,432	115	44,386,800	0.0	1,296	3.59	
3/27/2008	2,496	128	19,094,400	503	0.60	27	0.03	38	0.05	40	0.05	0.72	6.15	6/16/2009	1,848	132	14,636,160	0.4	2,042	1.86	
6/2/2008	1,608	119	11,481,120	680	0.49	27	0.02	38	0.03	40	0.03	0.56	6.64	7/25/2010	2,184	132	17,297,280	0.6	2,416	2.61	
9/12/2008	2,448	132	19,388,160	883	1.07	27	0.03	38	0.05	40	0.05	1.20	7.71	4/23/2010	1,848	115	12,751,200	0.9	2,975	2.37	
11/26/2008	1,800	132	14,256,000	748	0.66	27	0.02	38	0.03	40	0.04	0.76	8.37	9/34	10/15/2010	4,200	115	28,980,000	0.5	2,229	4.03
3/24/2009	2,632	132	22,627,080	34	0.05	27	0.04	38	0.05	40	0.06	0.19	8.42	9/54	1/21/2011	2,552	132	18,627,840	0.2	1,669	1.94
6/15/2009	1,992	132	15,775,640	136	0.13	27	0.03	38	0.04	40	0.04	0.24	8.56	9/77	<b>TOTALS:</b>	<b>37,796</b>	<b>292,654,720</b>	<b>34.85</b>			
8/2/2009	1,608	132	12,735,60	95	0.08	27	0.02	38	0.03	40	0.03	0.16	8.63	9/93							
11/5/2009	1,824	132	14,446,080	34	0.03	27	0.02	38	0.03	40	0.04	0.13	8.66	10/06							
2/5/2010	2,208	132	17,487,360	82	0.09	27	0.03	38	0.04	40	0.04	0.20	8.75	10/26							
4/23/2010	1,848	115	12,751,200	116	0.09	27	0.02	38	0.03	40	0.03	0.18	8.84	10/44							
7/23/2010	2,184	115	15,069,600	34	0.03	27	0.03	38	0.04	40	0.04	0.13	8.87	10/57							
10/13/2010	1,968	115	13,575,200	34	0.03	27	0.02	38	0.03	40	0.03	0.12	8.90	10/69							
1/21/2011	2,400	132	19,008,000	34	0.04	27	0.03	38	0.05	40	0.05	0.16	8.94	10/85							
<b>TOTALS:</b>	<b>37,993</b>		<b>291,016,440</b>		<b>8.94</b>	<b>0.49</b>			<b>0.70</b>		<b>0.72</b>	<b>10.85</b>									

**Lab Data for Air Mitigation System B-5**  
 First Quarter 2011  
 1/21/2011  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
 Indianapolis, Indiana  
**MUNDELL Project No.: M01046**

Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	B-5 (Lab Data)				B-5 (PID Readings)				
				µg/m³ PCE removed	Lbs. PCE removed	µg/m³ TCE removed	Lbs. TCE removed	µg/m³ VC removed	Lbs. VC removed	µg/m³ Cis-1,2-DCE	Lbs. cis-1,2-DCE removed	Average Flow Rate (CFM)
3/27/2008	0.5	130	3,900	883	0.00	27	0.00	38	0.00	40	0.00	0.00
3/28/2008	24	127	182,880	496	0.01	27	0.00	38	0.00	40	0.01	0.01
4/24/2008	648	120	4,665,600	367	0.11	27	0.01	38	0.01	40	0.01	0.14
5/1/2008	168	115	1,158,200	394	0.03	27	0.00	38	0.00	40	0.00	0.04
6/2/2008	768	114	5,253,120	401	0.13	27	0.01	38	0.01	40	0.01	0.17
7/10/2008	912	115	6,292,800	442	0.17	27	0.01	38	0.02	40	0.02	0.21
9/12/2008	1,536	114	10,503,240	469	0.31	27	0.02	38	0.03	40	0.03	0.38
11/26/2008	1,800	113	12,204,000	489	0.37	27	0.02	38	0.03	40	0.03	0.45
3/29/2009	2,632	122	20,730,240	1,427	1.85	27	0.03	38	0.05	40	0.05	1.98
6/15/2009	1,992	122	14,581,440	394	0.36	27	0.02	38	0.03	40	0.04	0.45
8/25/2009	1,608	122	11,770,560	428	0.31	27	0.02	38	0.03	40	0.03	0.39
11/5/2009	1,824	122	13,351,680	883	0.74	27	0.02	38	0.03	40	0.03	0.82
2/5/2010	2,208	110	14,372,800	150	0.14	26,93	0.02	38	0.03	40	0.04	0.23
4/23/2010	1,848	110	12,195,600	82	0.06	27	0.02	38	0.03	40	0.03	0.14
7/23/2010	2,184	110	14,414,400	183	0.16	27	0.02	38	0.03	40	0.04	0.26
10/15/2010	2,016	130	15,724,800	102	0.10	27	0.03	38	0.04	40	0.04	0.20
12/1/2011	2,352	110	15,522,200	224	0.22	27	0.03	38	0.04	40	0.04	0.32
<b>TOTALS:</b>	<b>24,721</b>		<b>173,133,660</b>		<b>5.06</b>		<b>0.29</b>		<b>0.41</b>		<b>0.43</b>	<b>6.19</b>
												<b>20.88</b>
												<b>183,621,640</b>
												<b>TOTALS:</b> <b>24,722</b>

**Lab Data for Air Mitigation System B-6**  
 First Quarter 2011  
 1/21/2011  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
 Indianapolis, Indiana  
**MUNDELL Project No.: M01046**

Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	B-6 (Lab Data)				B-6 (PID Readings)									
				µg/m <sup>3</sup> PCE removed	µg/m <sup>3</sup> TCE removed	Lbs. TCE removed	µg/m <sup>3</sup> VC removed	Lbs. VC removed	Lbs. cit-1,2-DCE removed	Lbs. Total Pollutants removed	Cumulative PCE lbs removed	Air Vol. Removed per Cycle (CF)	Average Flow Rate (CFM)	FID Reading (ppm VOCs)	µg/m <sup>3</sup> VOCs	Lbs. VOCs Removed	Cum Total lbs Removed (Est from PID)
3/27/2008	0.5	130	3,900	8,155	0.00	27	0.00	38	0.00	40	0.00	0.00	0.00	0.00	0.06	0.06	
3/28/2008	24	119	171,144	3,330	0.04	27	0.00	38	0.00	40	0.04	0.04	0.04	3,349	2,54	2,60	
4/24/2008	648	114	4,426,488	748	0.21	27	0.01	38	0.01	40	0.24	0.27	0.27	12,168,000	1.1	12,168,000	
5/12/2008	188	123	1,234,800	1,427	0.11	27	0.00	38	0.00	40	0.12	0.35	0.39	12,513,600	0.5	2,229	
6/2/2008	768	120	5,506,560	1,495	0.51	27	0.01	38	0.01	40	0.01	0.55	0.87	1,890,000	0.1	4,34	
8/20/2008	1,896	120	13,651,200	1,835	1.56	27	0.02	38	0.03	40	0.03	1.65	2.43	8,121,200	15.9	30,965,82,00	
9/12/2008	552	114	3,775,680	1,223	0.29	27	0.01	38	0.01	40	0.01	0.31	2.72	11,15/2009	0.1	1,483	
11/26/2008	1,800	112	12,098,000	748	0.56	27	0.02	38	0.03	40	0.03	0.64	3.28	2/5/2010	0.9	14,227,200	
3/24/2009	2,832	118	20,050,560	883	1.10	27	0.03	38	0.05	40	0.05	1.24	4.39	5/12/2010	0.9	19,872,000	
6/15/2009	1,992	118	14,103,360	571	0.50	27	0.02	38	0.03	40	0.03	0.59	4.89	10/15/2010	0.5	29,203,200	
8/2/2009	1,608	118	11,384,640	483	0.34	27	0.02	38	0.03	40	0.03	0.42	5.23	1/21/2011	0.4	18,345,200	
11/5/2009	1,824	118	12,913,920	748	0.60	27	0.02	38	0.03	40	0.03	0.69	5.83	TOTALS:	24,722	178,044,720	
2/5/2010	2,208	150	19,872,000	544	0.67	6	0.01	38	0.05	40	0.05	0.78	6.51	7/2/2010	7.26	9,356,320	
5/12/2010	2,304	93	12,956,320	883	0.71	26,93	0.02	38	0.03	40	0.03	0.79	7.22	8/06	8,06	11,448,800	
7/23/2010	1,728	110	11,448,800	680	0.48	27	0.02	38	0.03	40	0.03	0.56	7.70	8/6/1	8.61	15,724,800	
10/15/2010	2,016	130	18,345,600	333	0.38	27	0.03	38	0.04	40	0.04	0.23	7.83	8/8/4	8.84	18,345,600	
1/21/2011	2,352	130	177,521,772	24,721	0.21	0.27	0.43	0.44	0.44	0.44	0.44	0.44	9.35			102.96	
<b>TOTALS:</b>																	

**Lab Data for Air Mitigation System B-7**  
 First Quarter 2011  
 1/21/2011  
 Michigan Plaza  
 3801-3825 West Michigan Street  
 Indianapolis, Indiana  
 MUNDELL Project No.: M01046

B-7 (Lab Data)												B-7 (PID Readings)									
Sample Date	Hours per Cycle	Average Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	µg/m³ PCE	Lbs. PCE removed	µg/m³ TCE	Lbs. TCE removed	µg/m³ VC	Lbs. VC removed	µg/m³ cis-1,2-DCE	Lbs. cis-1,2-DCE removed	Lbs. Total Pollutants Removed	Cumulative PCEs Removed	Cumulative Pollutant lbs Removed	Avg. Flow Rate (CFM)	Air Vol. Removed per Cycle (CF)	PID Reading (ppm VOCs)	µg/m³ VOCs	Lbs. VOCs Removed	Cum Total lbs Removed (Est from PID)	
4/7/2008	0.5	118	3,540	516	0.00	27	0.00	38	0.00	40	0.00	0.00	0.00	0.00	6/2/2008	1,344	130	10,483,200	0.3	1,856	1.21
4/8/2008	24	118	169,920	319	0.00	27	0.00	38	0.00	40	0.00	0.00	0.00	0.00	7/10/2008	912	110	6,019,200	0.5	2,229	0.84
4/24/2008	384	118	2,718,720	150	0.03	27	0.00	38	0.01	40	0.01	0.04	0.03	0.05	9/12/2008	1,536	130	11,980,800	0.1	1,483	1.11
5/1/2008	188	120	1,209,600	265	0.02	27	0.00	38	0.00	40	0.00	0.03	0.03	0.06	11/26/2008	1,800	110	11,980,000	0.2	1,669	1.24
6/2/2008	768	117	5,391,360	360	0.12	27	0.01	38	0.01	40	0.01	0.16	0.17	0.23	8/21/2009	6,432	132	50,941,440	3.3	7,454	23.69
7/10/2008	912	118	6,456,960	367	0.15	27	0.01	38	0.02	40	0.02	0.19	0.32	0.42	11/5/2009	1,824	130	14,227,200	0.0	1,296	1.15
9/12/2008	1,536	114	10,506,240	367	0.24	27	0.02	38	0.03	40	0.03	0.31	0.56	0.73	2/5/2010	2,028	110	14,572,800	0.1	1,483	1.35
11/26/2008	1,800	112	12,098,000	381	0.29	27	0.02	38	0.03	40	0.03	0.37	0.85	1.10	5/6/2010	2,160	130	16,848,000	0.0	1,296	1.36
3/24/2009	2,832	118	20,050,560	401	0.50	27	0.03	38	0.05	40	0.05	0.63	1.35	1.73	10/15/2010	3,888	130	30,326,400	0.1	1,483	2.80
6/15/2009	1,992	118	14,103,360	34	0.03	27	0.02	38	0.03	40	0.03	0.12	1.38	1.85	1/21/2011	2,352	130	18,345,600	0.1	1,483	1.70
8/21/2009	1,608	118	11,384,640	34	0.02	27	0.02	38	0.03	40	0.03	0.10	1.40	1.95	<b>TOTALS:</b>						<b>36.44</b>
11/5/2009	1,824	118	12,913,920	34	0.03	27	0.02	38	0.03	40	0.03	0.11	1.43	2.06							
2/5/2010	2,208	110	14,572,800	34	0.03	27	0.02	38	0.03	40	0.04	0.13	1.46	2.19							
4/23/2010	1,848	130	14,414,400	34	0.03	27	0.02	38	0.03	40	0.04	0.13	1.49	2.32							
7/23/2010	2,184	130	17,635,200	34	0.04	27	0.03	38	0.04	40	0.04	0.15	1.53	2.46							
10/15/2010	2,016	130	15,724,800	34	0.03	27	0.03	38	0.04	40	0.04	0.14	1.56	2.60							
12/1/2011	2,352	130	18,345,600	34	0.04	27	0.03	38	0.04	40	0.05	0.16	1.60	2.76							
<b>TOTALS:</b>	<b>24,457</b>		<b>177,097,620</b>		<b>1.60</b>	<b>0.30</b>	<b>0.42</b>	<b>0.44</b>	<b>0.42</b>	<b>0.44</b>	<b>2.76</b>										

**Michigan Plaza**  
**First Quarter 2011**  
**1/21/2011 & 4/08/2011**  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

Cumulative Totals (B-1-B-4)				
Sample Date	Lbs PCE Removed	Cumulative PCE lbs Removed	Lbs. Total Pollutants Removed	Cumulative Total Pollutant lbs Removed
9/21/2006	0.00	0.00	0.00	0.00
10/6/2006	2.36	2.36	2.43	2.43
10/13/2006	0.68	3.05	0.71	3.14
10/20/2006	0.98	4.03	1.01	4.14
11/17/2006	3.41	7.44	3.51	7.65
12/27/2006	4.52	11.95	4.67	12.32
3/30/2007	7.00	18.95	7.33	19.65
6/15/2007	4.64	23.59	6.55	26.20
10/16/2007	6.42	30.01	6.86	33.06
12/14/2007	5.31	35.33	5.53	38.59
3/27/2008	7.84	43.17	8.23	46.82
4/1/2008	1.20	44.36	1.25	48.07
6/2/2008	6.16	50.53	6.39	54.46
9/12/2008	8.69	59.22	9.05	63.51
11/26/2008	4.38	63.59	4.62	68.13
3/24/2009	7.64	71.24	8.02	76.15
6/15/2009	4.53	75.77	4.80	80.94
8/21/2009	3.90	79.67	4.14	85.08
11/5/2009	3.90	83.57	4.17	89.25
2/5/2010	1.81	85.38	2.03	91.28
4/23/2010	0.34	85.72	0.38	91.66
7/23/2010	1.55	87.27	1.72	93.38
10/15/2010	0.57	87.83	0.78	94.15
1/21/2011	0.55	88.38	0.65	94.81
4/8/2011	2.98	90.82	3.54	98.34

**Michigan Apartments**  
**First Quarter 2011**  
**1/21/2011**  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

<b>Cumulative Totals (B-5-B-7)</b>				
Sample Date	Lbs PCE Removed	Cumulative PCE lbs Removed	Lbs. Total Pollutants Removed	Cumulative Total Pollutant lbs Removed
3/27/2008	0.00	0.00	0.00	0.00
3/28/2008	0.04	0.04	0.04	0.05
4/7/2008	0.00	0.04	0.00	0.05
4/8/2008	0.00	0.05	0.00	0.05
4/24/2008	0.34	0.39	0.42	0.47
5/1/2008	0.16	0.54	0.18	0.65
6/2/2008	0.77	1.31	0.87	1.52
7/10/2008	0.32	1.63	0.40	1.93
8/20/2008	1.56	3.19	1.65	3.58
9/12/2008	0.84	4.03	1.00	4.58
11/26/2008	1.22	5.25	1.46	6.04
3/24/2009	3.45	8.71	3.85	9.89
6/15/2009	0.89	9.60	1.17	11.06
8/21/2009	0.68	10.28	0.91	11.97
11/5/2009	1.40	11.67	1.75	13.71
2/5/2010	0.93	12.60	1.34	15.05
4/23/2010	0.15	12.76	0.32	15.37
7/23/2010	0.68	13.44	0.95	16.32
10/15/2010	0.23	13.66	0.43	16.75
1/21/2011	0.64	14.30	0.99	17.74

**Cumulative Total LBS Removed**  
**First Quarter 2011**  
**1/21/2011 & 4/08/2011**  
**Michigan Plaza**  
**3801-3823 West Michigan Street**  
**Indianapolis, Indiana**  
**MUNDELL Project No.: M01046**

**Cumulative Totals (B-1-B-7)**

Sample Date	Lbs PCE Removed	Cumulative PCE lbs Removed	Lbs. Total Pollutants Removed	Cumulative Total Pollutant lbs Removed
9/21/2006	0.00	0.00	0.00	0.00
10/6/2006	2.36	2.36	2.43	2.43
10/13/2006	0.68	3.05	0.71	3.14
10/20/2006	0.98	4.03	1.01	4.14
11/17/2006	3.41	7.44	3.51	7.65
12/27/2006	4.52	11.95	4.67	12.32
3/30/2007	7.00	18.95	7.33	19.65
6/15/2007	4.64	23.59	6.55	26.20
10/16/2007	6.42	30.01	6.86	33.06
12/14/2007	5.31	35.33	5.53	38.59
3/27/2008	7.84	43.17	8.23	46.82
3/28/2008	0.04	43.21	0.04	46.87
4/1/2008	1.20	44.41	1.25	48.12
4/7/2008	0.00	44.41	0.00	48.12
4/8/2008	0.00	44.41	0.00	48.12
4/24/2008	0.34	44.75	0.42	48.54
5/1/2008	0.16	44.91	0.18	48.72
6/2/2008	6.93	51.84	7.26	55.98
7/10/2008	0.32	52.16	0.40	56.39
8/20/2008	1.56	53.72	1.65	58.04
9/12/2008	9.53	63.25	10.05	68.09
11/26/2008	5.60	68.85	6.08	74.17
3/24/2009	11.10	79.94	11.87	86.03
6/15/2009	5.42	85.37	5.97	92.00
8/21/2009	4.59	89.95	5.05	97.05
11/5/2009	5.26	95.22	5.79	102.84
2/5/2010	2.71	97.92	3.25	106.09
4/23/2010	0.49	98.41	0.69	106.78
7/23/2010	2.23	100.64	2.67	109.45
10/15/2010	0.80	101.44	1.21	110.66
1/21/2011	1.19	101.83	1.64	111.08
4/8/2011	2.98	104.42	3.54	114.19